



RBL 1802



Library  
of the  
University of Toronto



41 - 2 vols.

Edward. Sidney Watson

Reward - To

Perseverance at

"School"



SQUIRREL.

DORMOUSE.

Illustrated  
SKETCHES  
OF  
Natural  
HISTORY.





ILLUSTRATED SKETCHES  
OF  
**NATURAL HISTORY;**  
CONSISTING OF  
DESCRIPTIONS AND ENGRAVINGS  
OF  
**ANIMALS.**

First Series.

---

PUBLISHED UNDER THE DIRECTION OF  
THE COMMITTEE OF GENERAL LITERATURE AND EDUCATION,  
APPOINTED BY THE SOCIETY FOR PROMOTING  
CHRISTIAN KNOWLEDGE.

---

LONDON :  
SOCIETY FOR PROMOTING CHRISTIAN KNOWLEDGE ;  
SOLD AT THE DEPOSITORIES :  
77, GREAT QUEEN STREET, LINCOLN'S INN FIELDS ;  
4, ROYAL EXCHANGE ; 48, PICCADILLY ;  
AND BY ALL BOOKSELLERS.  
New York : Pott, Young, & Co.

PRINTED  
For the Society for Promoting Christian Knowledge  
AT THE CLARENDON PRESS,  
OXFORD.

# C O N T E N T S.

---

	<i>Page</i>		<i>Page</i>
ANT-BEAR, GREAT . . . . .	136	DOG, THE NEWFOUNDLAND . . . . .	35
ARMADILLO . . . . .	134	DOG, THE SHEPHERD'S . . . . .	33
ASS, THE COMMON . . . . .	74	DOLPHIN . . . . .	49
AUK, THE GREAT . . . . .	252	DOVE, ( <i>see</i> TURTLE DOVE). . . . .	
BADGER . . . . .	19	DRAGON FLY . . . . .	335
BAT, THE LONG-EARED . . . . .	8	DROMEDARY . . . . .	76
BAT, THE VAMPIRE . . . . .	10	DUCK, THE MALLARD . . . . .	247
BEAR, THE BROWN . . . . .	16	EAGLE, THE GOLDEN . . . . .	150
BEAR, THE WHITE . . . . .	17	EAGLE, THE HARPY . . . . .	153
BEAVER . . . . .	112	EEL, THE COMMON . . . . .	312
BEETLE, THE STAG . . . . .	331	ELEPHANT, INDIAN . . . . .	57
BIRDS OF PARADISE . . . . .	186	ELK . . . . .	80
BISON . . . . .	106	EMU . . . . .	220
BITTERN . . . . .	230	FALCON, PEREGRINE . . . . .	154
BLIND-WORM . . . . .	271	FLAMINGO . . . . .	241
BOA-CONSTRICTOR . . . . .	273	FLYING FISH . . . . .	299
BOAR, THE WILD . . . . .	61	FOX, THE COMMON . . . . .	42
BUFFALO OF THE CAPE . . . . .	103	FROG, THE COMMON . . . . .	283
BULL, ENGLISH . . . . .	108	GAZELLE, THE DORCAS . . . . .	89
BUSTARD, GREAT . . . . .	222	GIRAFFE . . . . .	87
BUTTERFLY, ( <i>THE PEACOCK</i> ) .	335	GNU . . . . .	92
CARP, COMMON . . . . .	295	GOAT, SYRIAN . . . . .	99
CART-HORSE . . . . .	70	GOAT, THE COMMON . . . . .	97
CASSOWARY . . . . .	218	GOLDFINCH . . . . .	173
CAT, DOMESTIC . . . . .	31	GOOSE, THE COMMON . . . . .	243
CATERPILLAR . . . . .	333	GREBE, THE EARED . . . . .	249
CHAMOIS . . . . .	94	GROUSE, THE BLACK . . . . .	213
CHINCHILLA . . . . .	117	GUINEA-PIG . . . . .	130
COBRA, EGYPTIAN . . . . .	279	GULL, GREAT BLACK-BACKED . . . . .	258
COCK, THE COMMON . . . . .	207	HADDOCK . . . . .	309
CODFISH . . . . .	307	HARE, COMMON . . . . .	127
CONDOR . . . . .	147	HEDGEHOG . . . . .	11
COOT . . . . .	239	HEN, THE COMMON . . . . .	209
CORALS . . . . .	340	HERON, THE COMMON . . . . .	228
CORMORANT, THE COMMON .	256	HERRING, THE COMMON . . . . .	305
COW, ENGLISH . . . . .	110	HIPPOPOTAMUS . . . . .	59
CRAB, THE COMMON . . . . .	326	HOG, THE COMMON . . . . .	63
CROCODILE . . . . .	267	HORSE ( <i>see</i> RACE AND CART-HORSE). . . . .	
CUCKOO . . . . .	192	HUMMING BIRDS . . . . .	190
CUTTLE-FISH, THE COMMON .	320	HYAENA, STRIPED . . . . .	44
DEER ( <i>see</i> RED AND REIN).		IBEX . . . . .	96
DOG, THE ESQUIMAUX . . . . .	36	IBIS, SCARLET . . . . .	234

## CONTENTS.

	<i>Page</i>		<i>Page</i>
JACKAL . . . . .	40	RAIL, THE WATER . . . . .	237
JAGUAR . . . . .	30	RAT, THE COMMON . . . . .	115
JERBOA . . . . .	119	RATTLE-SNAKE . . . . .	277
KANGAROO, GREAT . . . . .	142	RAVEN . . . . .	177
KING-FISHER, THE COMMON . . . . .	181	REDBREAST . . . . .	164
KITE . . . . .	156	RED DEER . . . . .	83
LAPWING . . . . .	226	REIN DEER . . . . .	82
LARK ( <i>see</i> SKYLARK).		RHINOCEROS . . . . .	65
LEECH, MEDICINAL . . . . .	337	ROEBUCK . . . . .	85
LEMUR, WHITE-FRONTED . . . . .	6	SALMON, THE COMMON . . . . .	301
LEOPARD . . . . .	28	SCORPION, THE COMMON . . . . .	330
LION, AFRICAN . . . . .	25	SEA URCHIN . . . . .	338
LIZARD, THE COMMON . . . . .	268	SEAL, THE COMMON . . . . .	45
LLAMA . . . . .	78	SHARK, THE WHITE . . . . .	316
LOBSTER, THE COMMON . . . . .	328	SHEEP, THE COMMON . . . . .	101
LOCUST . . . . .	334	SHREW . . . . .	14
MACAW, BLUE AND YELLOW . . . . .	198	SKATE, THE COMMON . . . . .	319
MACKAREL, THE COMMON . . . . .	290	SKY-LARK . . . . .	169
MADREPORE . . . . .	340	SLOTH, THE THREE-TOED . . . . .	132
MAGPIE . . . . .	179	SNAKE, THE COMMON ( <i>see also</i> RATTLESNAKE) . . . . .	275
MANATEE . . . . .	56	SPARROW, THE HOUSE . . . . .	171
MANDRILL . . . . .	5	SQUIRREL, ROCKY-MOUNTAIN . . . . .	122
MANIS . . . . .	137	SQUIRREL, THE COMMON . . . . .	120
MOLE . . . . .	13	STAR-FISH . . . . .	338
MOUSE, COMMON . . . . .	114	STARLING . . . . .	175
NIGHTINGALE . . . . .	165	STORK, THE WHITE . . . . .	232
NIGHT JAR . . . . .	184	STURGEON, THE COMMON . . . . .	315
NYLGHAU . . . . .	91	SWALLOW, THE CHIMNEY . . . . .	182
OPOSSUM, VIRGINIAN . . . . .	139	SWAN . . . . .	245
ORANG-OUTAN . . . . .	1	SWORD-FISH . . . . .	293
OSTRICH . . . . .	216	TAPIR . . . . .	67
OTTER . . . . .	23	THRUSH, SONG . . . . .	162
OX, THE INDIAN . . . . .	104	TIGER . . . . .	26
OYSTER, THE COMMON . . . . .	323	TITMOUSE, LONG-TAILED . . . . .	167
OWL, GREAT SNOWY . . . . .	160	TOAD, THE COMMON . . . . .	285
OWL, THE WHITE BARN . . . . .	158	TOQUE . . . . .	3
PARRAKEET, ALEXANDRINE . . . . .	196	TORTOISE, BORDERED . . . . .	263
PARROT, THE GREY . . . . .	194	TROUT, THE COMMON . . . . .	303
PARTRIDGE, THE COMMON . . . . .	211	TURBOT . . . . .	311
PEACOCK . . . . .	203	TURKEY . . . . .	201
PELICAN, THE WHITE . . . . .	254	TURTLE-DOVE . . . . .	200
PENGUIN, PATAGONIAN . . . . .	250	TURTLE, HAWKSBILL . . . . .	265
PERCH, THE COMMON . . . . .	289	VIPER, THE COMMON . . . . .	281
PHEASANT, THE COMMON . . . . .	205	VULTURE, EGYPTIAN . . . . .	149
PIKE, THE COMMON . . . . .	297	WALRUS . . . . .	47
PINNA . . . . .	325	WEASEL, THE COMMON . . . . .	21
PLATYPUS . . . . .	140	WHALE, THE COMMON . . . . .	52
PLOVER, THE GOLDEN . . . . .	224	WHALE, THE RORQUAL . . . . .	54
PORCUPINE, BRAZILIAN . . . . .	125	WOLF . . . . .	38
PORCUPINE, CRESTED . . . . .	124	WOODCOCK . . . . .	236
PORPOISE, THE COMMON . . . . .	51	WOODPECKER, GREEN . . . . .	188
QUÁIL, THE COMMON . . . . .	214	ZEBRA . . . . .	72
RABBIT . . . . .	128	CONCLUSION . . . . .	343
RACE-HORSE . . . . .	63		

## THE ORANG-OUTAN.



MONKEYS are classed as Quadrupeds ; they are also distinguished as *Quadrumana*, from their generally possessing four long and flexible hands, with fingers and thumbs. These hands are chiefly formed for grasping and climbing ; and as Monkeys live generally in

forests, which not only supply them with food, but afford them shelter from enemies and from the scorching heat of a tropical sun, the object of their peculiar formation need not be dwelt upon. Monkeys are the most expert of climbers ; performing amazing leaps with perfect ease.

Their native countries are the warm parts of Africa, India, and America. Their food is chiefly vegetable ; the forests affording them fruits and nuts, roots and shrubs. Insects are easily caught by them, and rapidly devoured. The honey of wild bees, and the eggs, as well as the young of birds, sometimes furnish them with a repast. The accounts, however, which have been given by some writers of the fondness of the Monkey for animal food in general appears to be erroneous.

Among the ancient Egyptians, Monkeys were held in great reverence. Like the sacred ibis, they were represented in Egyptian sculpture, and their bodies were preserved as mummies. In the narrative given us of the possessions of King Solomon, it is recorded that he had at sea a navy of Tharshish, which came once every three years, bringing gold and silver, ivory, and apes, and peacocks.\*

THE Orang-outan (which is a Malay phrase, meaning “ Wild man ”), bears considerable resemblance, at first view, to the human figure ; but the difference is very striking, and is more clearly seen in the skeleton than in the living creature : it is then evident how much the forehead wants height and breadth : the arms are so long that the hands of the erect figure reach the ankle-joints ; the feet, or rather lower arms, turn inwards, each having a thumb opposed to the fingers. There are other marks of difference, though we will mention only one more. Man has the upright posture, which the ancient Greek word,† describing our race, so

\* 1 Kings x. 22. 2 Chron. ix. 21.

† *Anthropos*, a compound word, signifying “looking upwards.”

well portrays, and which should serve to remind reasoning beings of their immortal state, and of the heavens to which they are instructed to look. Milton, in his *Paradise Lost*, has not failed to notice this distinguishing attitude of man. He describes, among

“ — all kind  
Of living creatures, new to sight, and strange,  
Two of far nobler shape, erect and tall,  
Godlike erect, with native honour clad,” &c.

Poets and philosophers among the heathen have also drawn useful lessons from the superior form of man.

The Orang-outan seldom walks upright, except when it has to carry anything in its fore-hands ; and if it tries to take an erect position, it requires help, as from a branch of a tree; and in walking it supports itself on its fore-arms, resting on the knuckles, not on the palms, with its head bent downwards, and swinging itself forward, as a lame man does on crutches. In the woods of Borneo, Sumatra, and other Indian islands, these animals run, and jump, and drop from bough to bough with a freedom and ease of which those who see them only in a state of captivity can scarcely form an idea. The height of one brought from Java, and exhibited at Exeter 'Change, Strand, between 1817. and 1819, was two feet seven inches ; the hair of a brownish-red colour. Dr. Abel, who brought him to England, had great difficulty at first in keeping him in order on board ship, but, on gaining his liberty, he became a favourite with the sailors. He died in 1819.

### THE TOQUE.

THE Toque is an inhabitant of India, in the southern regions of which large troops of this species may be

found among the woods. They are also said to live in populous towns, whence they carry off fruit and grain with great coolness and address. Numbers of these animals are kept with superstitious care in the Hindoo temples, and are very jealous of the approach of any fresh comers of other species, driving them away with the utmost fury.



The Toque, or Bonnet Macaque, derives its name from the position of the hairs on the crown of the head, which arrange themselves in a form resembling a cap or bonnet. It is well known in this country, being frequently brought hither by sailors and travellers.

and being of a hardy constitution it will survive longer than most monkeys in this climate. Though easily tamed to a certain degree, it is never very amiable, but is snappish, irritable, resentful, and, when not indulged, is given to mischievous and spiteful tricks. In India this monkey often does great damage to the "crops of the natives, who, however, from superstitious motives, do not resent its ravages.

## THE MANDRILL.



THIS powerful and savage creature is called by Pennant, the *Ribbed-nosed Baboon*. It is of great size, and very dangerous. Even after care and kindness shown

towards it, when kept some time in a cage, the furious disposition of the Mandrill breaks forth in acts of wanton violence. One that was in the possession of Mr. Wombwell killed a monkey, a beagle, and a Java sparrow, which, by accident, came within its reach. Another, in Mr. Cross's menagerie, was, in his quiet moments, when nothing went wrong to vex him, exceedingly amusing. He sat in an arm-chair, looking quite grave, smoking and drinking porter. But the slightest offence, the merest trifle, wholly unintended as an affront, would suddenly rouse him to the most dreadful fits of passion. His appearance was then terrible, sufficient to alarm the boldest; nor could any man, unarmed, have had any chance with him in the contest.

It would be wise in fierce and angry people, if they would consider, from such instances as these, what a frightful and unseemly spectacle is exhibited, when such gusts of uncontrolled passion arise.

The Mandrill is a native of Guinea, and other parts of Western Africa, where it is greatly dreaded. Troops of these animals dwell together in large forests, and are often more than a match for the strongest beasts of prey. They sometimes enter villages and fields, and commit serious depredations; the inhabitants, especially the women, hold them in the utmost terror, as well as abhorrence. When on the ground, they generally move on all-fours; but they leap and climb with great dexterity. Their voice is deep and guttural, and betokens mischief and malice.

---

### THE WHITE-FRONTED LEMUR.

THE Latin word *Lemur* signifies a spectre; and it appears that Linnæus adopted this term for the singular

animal before us, in allusion to its nocturnal habits, as well as its noiseless sweeping movements. It is *Quadrumanous*, or Four-handed, like the monkey, and has much of the lightness and agility of that creature ; but a comparison of the skull of the monkey with that of the Lemur will show a very marked distinction ; the former



bearing a far greater resemblance to the human skull. There are many species of the Lemur, all being natives of Madagascar and the adjacent islands, and inhabitants of the woods. They sleep in their hiding-places during the day, but come forth in troops after sunset.

Their usual voice is a low suppressed grunt, which often breaks forth into a sudden roar. They feed on

fruits, insects, reptiles, small birds, and eggs. Pleasing accounts are given of the animals of this kind which have been in this country in a state of captivity. Though less intelligent than monkeys in general, they are more gentle and confiding. They will put their heads to the bars of their cage to have them scratched and rubbed, and by their actions invite notice. When presented with food, they usually take it with their hands; but they sometimes feed on soft bread without holding it. They lap fluid like a dog. The White-fronted Lemur is affectionate and lively. It leaps with amazing swiftness and elegance, with its tail elevated; and after a spring of many yards, pitches so lightly on its fingers, as scarcely to be heard.

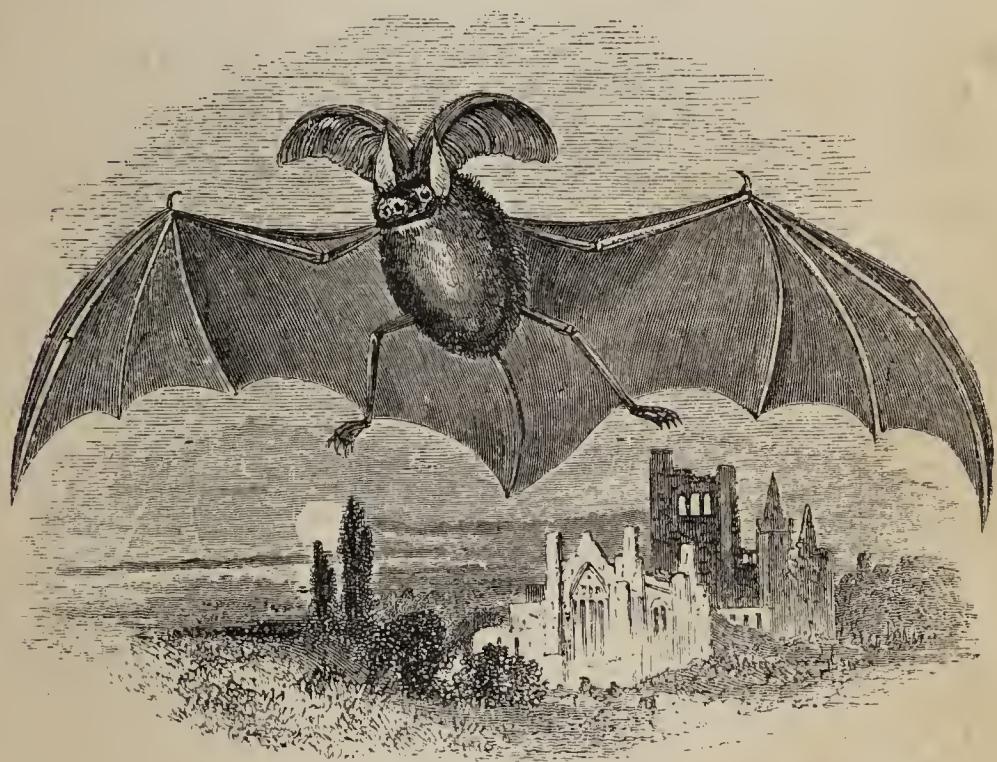
---

### THE LONG-EARED BAT.

THERE are many species of Bats known as natives of Great Britain; Mr. Bell, in his "British Quadrupeds," has mentioned no fewer than nineteen; and, if these curious creatures could be more easily caught, it is likely that some other kinds of the same family would be found to belong to this country. They are classed among British quadrupeds; but are unlike any quadrupeds, inasmuch as they are formed for the purpose of very rapid flight. One of the old English names, however, for the Bat—*Flittermouse*, which signifies "flittering, or flying mouse," gives the idea of a quadruped.

The length of the head and body of the common Bat is rather less than two inches; while the extent of its wings is upwards of eight inches. It has a quick and flitting motion, chasing through the air the gnats and other insects upon which it feeds. Sleeping during the day in the most retired places, in the hollows of trees,

or in deserted quarries, or concealing itself in ruined buildings, or in the roofs of ancient churches, it avoids the glare of daylight : but when the shades of evening come on, and hunger tempts the timid animal from its lurking-place, it is brisk and lively. In winter bats are in a torpid state. They crowd together in vast numbers under the roofs of houses and churches, or in caverns, holding not only by the walls or ceilings of their dwelling, but by each other ; being collected so closely



together that it would seem scarcely possible for so many to be contained in so small a space.

The Bat is spoken of in Scripture as one of the unclean\* animals ; and the prophet Isaiah, in the chapter in which he “prophesieth the coming of Christ’s kingdom,” says, “In that day a man shall cast his idols of silver, and his idols of gold, which they made each one for himself to worship, to the moles and to the bats.”†

\* Deut. xiv. 18.

† Isaiah ii. 20.

These words may be applied at the present time to the diffusion of the light of the Gospel among heathen nations, and especially to the propagation of Christian truth in Southern India.

## THE VAMPIRE BAT.



J.W. WHINNELL.

THE Vampire Bat is a very formidable, though a very little creature ; its total length being about six inches. It is a native of South America ; and, from its bloodthirsty character, and murderous nocturnal attacks, has furnished to romance-writers a name for an imaginary being, who is depicted as practising, in human shape, the frightful arts of the Vampire. The repulsive propensities of this animal have perhaps been

somewhat overdrawn by travellers ; but the concurrent testimony of Stedman, Swainson, Darwin, Waterhouse, and others, is sufficient to establish the fact upon which much fiction has been founded.

Captain Stedman, in his interesting account of a visit to Surinam, informs us, that he was himself severely bitten by one of these bats during the night, whilst asleep in his hammock ; and that he was supposed by his surgeon to have lost twelve or fourteen ounces of blood. He says that when the victim is in a sound slumber, the little blood-sucker generally alights near the feet, and bites a very small piece out of the great toe, in such a way as to cause little, if any, pain ; fanning the sleeper, meanwhile, with its enormous wings, and thus keeping him cool : "and," he adds, "the sufferer has often been known to sleep from time into eternity." Stedman, on awaking from the treacherous assault, applied tobacco-ashes as the best remedy, and soon got well. Mr. Darwin, when bivouacking one evening near Coquimbo, in Chili, caught a Vampire in the act of sucking one of the horses, and fortunately secured the offender before much injury had been done. It is known to suck the blood of mules, asses, cattle, and poultry. Greater mischief is thought to ensue, in most cases, from the inflammation caused by the wound, than from the actual loss of blood.

---

### THE HEDGEHOG.

THIS animal is often found in hedges ; its head and face are shaped like those of a hog ; and hence it has received its name. Its length from the tip of its snout to the end of its tail is between nine and ten inches. Its body is covered above and at the sides with sharp prickles, about an inch long, which serve effectually to protect it from its enemies. When the hedgehog finds

danger to be near, it folds itself up into a kind of ball ; and then the enraged dog may fly at it, and bark, and roll it about with his paws ; but the armour which its Maker has given it generally keeps it from harm.

If pursued, it does not hesitate to drop from a height of twelve or fourteen feet, being protected by its elastic covering. It then unfolds itself, and runs off unhurt.



The food of the Hedgehog is various : it eats insects, worms, slugs, and snails ; and not only these, but frogs, toads, mice, and even snakes. Like most other wild animals, it spends the greatest part of the day in sleep, and hunts about very busily for its food during the night. It is easily tamed, and when kept in a house, will eat bread and milk out of the same plate with a dog or cat. It is sometimes kept in kitchens, for the purpose of ridding them of black beetles, which it eats

very quickly, running about with a quick and shuffling pace from one to another, as soon as all is quiet at night. It is said to do mischief among game by eating the eggs ; and even to enter a hen-house, and, turning the hen off her eggs, to devour them.

The Hedgehog retires in winter to its nest of moss and leaves, and rolling itself up into a ball, passes the cold and dreary season in sleep. Its usual retreats are the hollow of a tree which is decayed at the roots ; or the hole of a rock, or in some overhanging bank.

## THE MOLE.



THE force of instinct is seen in few animals more clearly than in this little quadruped. Its mode of life, and the works which it performs under great

disadvantages, afford striking proofs of the wisdom and kindness of the great Creator. Constant toil in the cold and dark earth is its lot; which, however, when we consider its form and powers, is doubtless one source of its comfort and happiness. The strength of the shoulder-bones, the legs, and the paws, renders it expert in digging; while its long muzzle is fitted for boring the soil in search of food. It has an acute sense of smell, and this sense, together with that of hearing, makes its deficiency as to sight of less consequence. So slight is the outward appearance of eyes, that the Mole has been said to be blind; but this is not the case, as has been proved by experiment.

The dwelling which a Mole generally forms for itself is a curious structure, containing galleries and a chamber, the latter having a passage from it to the high road, for the purpose of safety. A full account of this remarkable fortress, accompanied with an engraving of it, and of the Mole's hunting-ground, appears in Professor Bell's work on British Quadrupeds. This animal's chief food is the earth-worm; it is also fond of mice, birds, lizards, and frogs.

Mention is made of Moles in Holy Scripture. See Deut. xiv. 18; Isaiah ii. 20. See also page 9.

---

### THE SHREW.

THE common Shrew is of the order *Insectivora*; that is, of the class of animals whose nature it is to devour the multitude of insects, which, if not destroyed, would spoil vegetation and render fruitless the labours of man. The animal before us, though common in this country, is so small and shy, that it generally escapes notice. It has a shrill, but feeble cry, which may sometimes be heard, when the Shrew itself is unseen.

sometimes on honey. Some creatures of this kind, which have been brought to England, have shown a preference for animal food. The Brown Bear was formerly a native of all parts of Europe ; but this is not the case now. In the Alps he is still common, as well as in the woods of Bohemia, Poland, and Russia. He is covered with a thick coat of long, soft, woolly hair, suited to the cold climate in which he is born.

It is said that Bears never attack man, unless they are provoked ; but when enraged, they are terribly fierce. They then raise themselves upon their hind feet, and try to squeeze their enemy between their fore legs, which are exceedingly powerful. Though their form appears clumsy, they climb trees, and swim with ease and skill. When tamed, they are sometimes taught to dance ; but great cruelties are inflicted in teaching them this practice.

The Bear is useful to man in many ways after its death. The people of Kamtschatka make many articles of clothing from its skin and fur ; its flesh is good for food ; its fat is used instead of oil ; its shoulder-blades are formed into sickles for cutting grass, &c.

---

### THE WHITE BEAR.

No greater proof can, perhaps, be found of the wisdom and design of the great Author of creation, in whom “we live, and move, and have our being,”\* than is afforded by the evident adaptation of the form and character of animals to the element and climate in which they chiefly live, and to the peculiar circumstances in which they are placed. It is almost impossible not to notice this in the instance of the Polar Bear, and in the difference between it and the species known as the Brown Bear, which is an inhabitant of the land.

\* Acts xvii. 28.

The White Bear is well fitted for a dwelling amidst the ice, and on the sea, in regions intensely cold. It is distinguished from its more inland relative by a nearer approach to the make of the otter, and other amphibious beasts of prey. This distinction can only be alluded to; there being no room for a description of particulars in this short account, beyond the observation, that the Polar Bear has much longer feet, the soles being clothed with long



hair, by which a firm footing on the ice is the better secured. Its manners and habits are marked with a still greater difference. Instead of seeking the covert of the forests, it prefers situations, such as the unsheltered summit of an iceberg, which would be death to most other creatures: or it will sit, watching at the openings of the frozen deep, for seals and other animals, which rise for air; and seizing them with its short black claws, will

devour them with avidity. Dead whales, or portions of fish, are, however, its favourite prey. When such diet is not to be got, it subsists on vegetable food.

Of the vast numbers seen by our adventurous countrymen, in recent northern expeditions, the largest appears to have been one, the length of which is stated by Captain Lyon, at 8 feet  $7\frac{1}{2}$  inches, and its weight at 1,600lbs. Some affecting anecdotes are recorded of the tender attachment of the female Bear to her young. She would, it is said, rather die than desert her helpless charge. What a reproof, or what lessons, do the habits of some animals convey to the unkind and thoughtless of our own race !

---

### THE BADGER.

THIS animal is classed among British quadrupeds, it being still found in many parts of England and Scotland : it is, however, nowhere very common, and in some places has become rare. It is a sleepy, heavy creature, living chiefly in holes dug by itself in the earth. In the evening, or during the darkness and silence of the night, it leaves its cell, and roams about for food. This consists of various roots, earth-nuts, beech-nuts, fruits, birds'-eggs, some of the smaller quadrupeds, frogs, and insects. Buffon states that it digs up wasps' nests for the sake of the honey.

The Badger possesses amazing strength of jaws, and has great muscular power : while its strong leathery hide and rough long hair render it a dangerous enemy to engage with. It was in consequence of these qualities, that the cruel custom of Badger-baiting was formerly practised in country towns and villages. The poor animal was placed in a small tub, bag, barrel, or kennel, and there baited by dogs of various kinds.

This sport, as it was called, often proved as cruel to the dogs, as to the poor Badger. Happily this, and other brutal amusements, which tend to harden the hearts of the spectators, are now scarcely known in this country.

The practice alluded to appears to have given rise to the verb “To badger ;” which means to worry and annoy. The above particulars are chiefly taken from



“British Quadrupeds,” by Professor Bell. He informs us, that he had for some time in his possession a Badger, which soon became a great favourite, and showed great attachment to him and the household.

“He followed me like a dog, yelping and barking with a peculiar sharp cry, when he found himself shut out of the room in which I happened to be sitting. He was accustomed to come into the dining-room during dinner, of which he was generally permitted to partake ;

and he always ate his morsels in a very orderly manner. He was in fact a gentle, affectionate, good-tempered fellow, and very cleanly withal." The usual length of the Badger, exclusive of the short tail, is two feet three inches.

### THE COMMON WEASEL.



THE length of the Common Weasel is rather more than eight inches. Its body is long, and feet short: the teeth and claws are extremely sharp. Its colour is reddish brown above, white beneath. It is a quick, watchful animal, and a great enemy to rats, mice, moles, and small birds. It sometimes makes free with partridges, young hares, rabbits, and chickens; but it may be said

to do more good than harm, when the rats and mice, and other vermin, which it kills, are taken into account. Indeed, the blame thrown upon the Weasel for robberies in the farm-yard and hen-roost is often due to the Stoat, or Ermine Weasel, which is a bold and destructive little creature.

The Common Weasel is an expert climber, and surprises birds in the nest, sucks the eggs, or carries off the young; but its chief objects of prey are the field-mouse and the mole. These it follows in their runs, finding its way into small holes, and among the close and tangled herbage of coppice, thickets, and hedge-rows. It hunts by scent, when it loses sight of the object of its pursuit, and will take the water and swim after it, if necessary. It is, however, itself, sometimes attacked by hawks. Mr. Bell\* relates the following fact, which shows that violence and rapine, even when accompanied by superior strength, are not always a match for the ingenuity of an inferior enemy.

"At Bloxworth, in Dorsetshire, a kite was seen to pounce on some object on the ground, and rise with it in its talons. The kite, however, soon began to show signs of uneasiness, and was evidently endeavouring to force from it with its feet something which gave it pain, when suddenly both fell to the ground. The gentleman who had watched the circumstance, on drawing near, saw a Weasel, apparently unhurt, run away from the kite, which was quite dead, with a hole eaten through the skin under the wing, and the large blood-vessels of the part torn through."

The Weasel will stoutly defend her young against any enemy, and die rather than desert them. The Weasel is mentioned in the Scriptures as an unclean animal. †

\* Bell's British Quadrupeds.

† Lev. xi. 29.

## THE OTTER.



THE common Otter is found along the shores of European rivers, and is not uncommon in this country. Its body is long and low; its tail, which is flat and broad, forms an excellent rudder, and is more than half the length of the head and body; its legs are short; its toes are connected by a complete web; its skin is protected by a fur of two very different kinds; the shorter hair being soft and fine, the longer coarse, hard, and shiny; its teeth are strong and sharp, enabling it to seize and hold the fish on which it chiefly feeds. The fur is much prized. The havoc which it makes among fish, is the chief offence of the Otter. It frequents rivers, lakes, and ponds, in order to take its prey; and sometimes descends to the sea. From its mischievous voracity,

it has received this bad character from honest Izaak Walton : "The Otter devours much fish, and kills and spoils much more than he eats." When compelled by hunger, the Otter is known to quit the stream, and travel to a distance overland, and to commit ravages among the farmer's stock, devouring rabbits, barn-door fowls, and even young pigs and lambs.

The Otter may be tamed, and even taught to catch and bring home fish for its master. "I pray, sir, save me one," says Izaak Walton, "and I'll try if I can make her tame, as I know an ingenious gentleman in Leicestershire, Mr. Nichs. Seagrave, has done; who hath not only made her tame, but to catch fish, and do many other things." Bishop Heber, in his Journal of a Residence in India, tells us, that he saw on the banks of the river Mattacolly, a row of nine or ten large and beautiful Otters, tethered with straw collars and long strings to bamboo stakes. Some were swimming about at the full extent of their strings, or lying half in and half out of the water. Others were rolling themselves in the sun, on the sandy bank, uttering a shrill whistling noise, as if in play. "I was told," says the Bishop, "that most of the fishermen in this neighbourhood kept one or more of these animals, which were almost as tame as dogs, and of great use in fishing ; sometimes driving the shoals into the nets, sometimes bringing out the larger fish with their teeth. I was much pleased and interested with the sight. It has always been a fancy of mine that the poor creatures whom we waste and persecute to death, for no cause but the gratification of our cruelty, might by reasonable treatment be made the sources of abundant amusement and advantage to us."—Professor Bell, who quotes this passage, adds : "This interesting account justifies the conclusion drawn by the good Prelate from the scene that so much delighted him, that 'the simple Hindoo shows here a better taste and judgment than half the otter-hunting and badger-hunting gentry of England.' "

## THE LION.



THE claws of all this tribe, such as the Lion, Tiger, Leopard, Panther, Common Cat, &c., are retractile; that is, the animal has the power of withdrawing them at pleasure into a hollow provided for that purpose in its feet.

The strength and courage of the Lion are so great, that he has been called the king of the beasts. His height is from three to four feet; his length from six feet to nine. His colour is tawny yellow. The mane is darker than the rest of the hair of his body. He is a native of the southern parts of Asia, but is more common in Africa, where he grows to the greatest size, and appears in all his strength and fierceness. He roams about in the forests seeking for prey, and sometimes

utters a roar so loud, that it sounds like distant thunder. The prophet says : "The Lion hath roared, who will not fear?" \*

The Lion often lies in wait for his prey, particularly at the watering-places where they come to drink ; he crouches under the long grass, or behind a mound, watching for hours together, and will often strike down an animal larger than himself, and which he cannot half devour.

Lions sometimes live to a great age : one, which was called Pompey, died in London in 1760, aged seventy years.

Humane treatment will make these creatures gentle. Many instances are known of their attachment to those who have shown them kindness ; and a Lion has sometimes permitted a little dog to live with him, on friendly terms, in the same cage.

Allusions to the Lion are very frequent in Holy Scripture. The strength, the boldness, and the destructive qualities of the animal are all noticed. See Psalm civ. 20 ; Prov. xxviii. 1, xxx. 30. St. Peter says : "Be sober, be vigilant ; because your adversary the devil, as a roaring lion, walketh about, seeking whom he may devour : whom resist stedfast in the faith." †

## THE TIGER.

THERE is no four-footed creature more beautiful than the Tiger : but there is none more fierce or violent. Its coat has deep stripes of black, on a ground of orange yellow : in form it resembles the cat, though it is much larger and stronger.

The tongue of the Tiger is very rough, the surface being covered with small sharp points, by means of

\* Amos iii. 8.

† 1 Pet. v. 8, 9.

which it removes the skin from the animals on which it feeds.

The native country of the Tiger is Central and Southern Asia, and the Asiatic Islands. It was found by Ehrenberg, as far north as Siberia : in China it is said to be common. In Sumatra, its ravages are dreadful, and it is often allowed to commit them with impunity. It sometimes preys upon human beings,



and indeed, it is said to prefer human flesh, when it has once partaken of it, to any other food. The inhabitants of the villages of India are greatly alarmed when they hear that a Tiger is in the neighbourhood. In springing upon any animal it utters a dreadful roar, and its strength is such, that when it has killed a deer, or horse, or even a buffalo, it carries off its prize to some neighbouring jungle. Hunting the Tiger is a favourite diversion of the great in the Eastern parts of the world.

Tigers have often been brought to England ; but it is very difficult to tame them. Sir Stamford Raffles had a young tortoiseshell Tiger, of another species, the *Felis Macroscelis* of Zoologists, a native of Sumatra, which was quite gentle. He says, "While in a state of confinement, it was remarkable for good temper and playfulness; no domestic kitten could be more so."

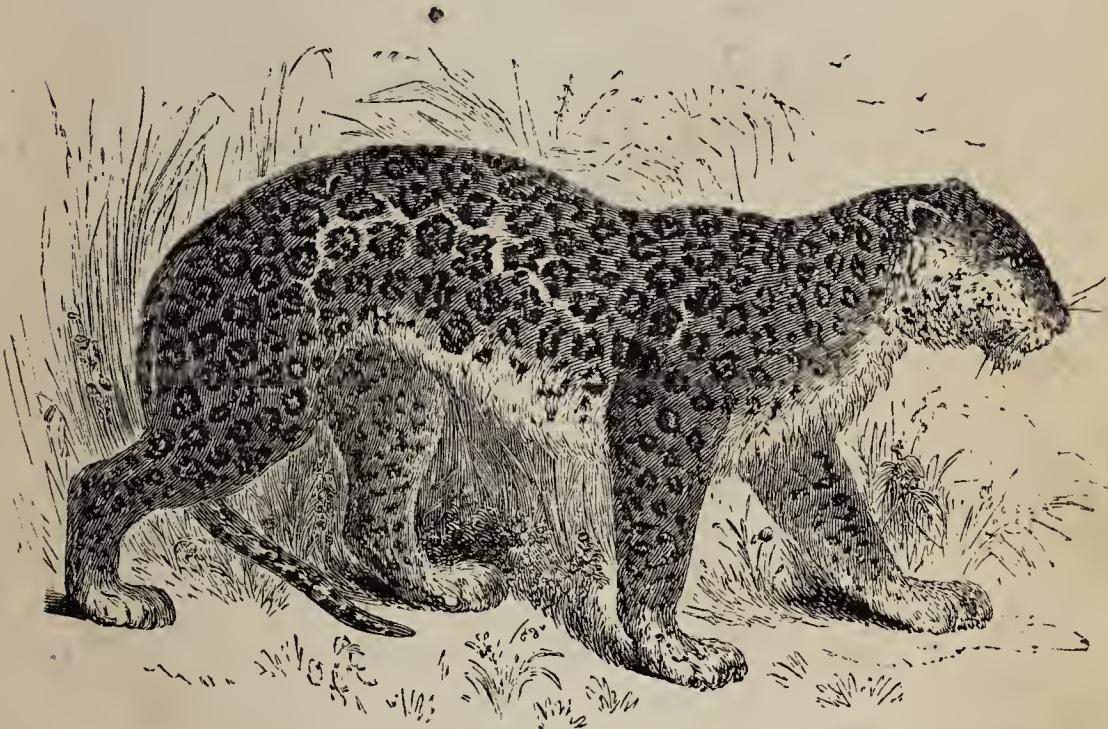
---

### THE LEOPARD.

THIS also is one of the animals of the cat kind. Its strength of muscle, and formidable teeth and claws, enable it to subdue the antelopes, monkeys, and the smaller quadrupeds which are its victims. No sooner is the game within reach, than, suddenly bursting forth from its lurking-place, or changing its slow, stealthy pace into a furious bound, it darts with the speed of an arrow on its prey. It is a very expert climber, and pursues the monkeys among the branches of trees with quickness and ease. Those persons who have witnessed the savage eagerness with which the Leopard, when in a state of confinement, seizes upon the food given it, may imagine the terrible nature of its attacks on living creatures in its wild state. On quitting the remains of the carcase, to which it never returns, it seeks out some lonely spot, where it may sleep off the effects of its meal; nor does it stir abroad till hunger excites it to another attack.

The Leopard is a native of Southern Asia, and of nearly the whole of Africa. It joins with much outward beauty a fierce and sly disposition, and habits extremely cruel. Both the appearance and habits of the Leopard are alluded to by the prophet Jeremiah, in very awful and striking language. In proclaiming God's judgments against a sinful nation, he says of his perverse and wicked countrymen, "A lion out of

the forest shall slay them, and a wolf of the evenings shall spoil them. A Leopard shall watch over their cities ; every one that goeth out thence shall be torn in pieces.”\* And by way of showing the power of evil habits, he asks, “Can the Ethiopian change his skin, or the Leopard his spots ? then may ye also do good that are accustomed to do evil.”† Yet a deliverance from the dominion of evil may be attained by means of Christ’s religion ; and the happy effects of this power of the



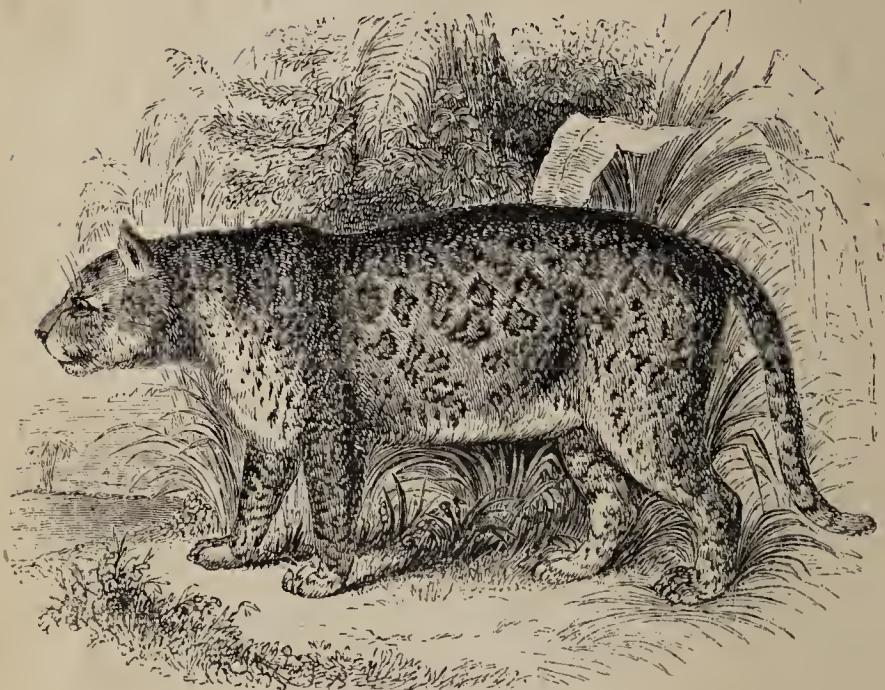
Holy Spirit on the hearts of men, which subdues their bad propensities, and changes their furiousness into peace, are represented by the Prophet Isaiah in the following words : “The wolf also shall dwell with the lamb, and the Leopard shall lie down with the kid, and the calf, and the young lion, and the fatling together ; and a little child shall lead them.”‡

\* Jer. v. 6.

† Jer. xiii. 23.

‡ Isa. xi. 6.

## THE JAGUAR.



Most of the wild animals of the cat kind, such as the Lion, the Tiger, and the Leopard, are natives of Asia and Africa. But there is a species of the same tribe, which is met with in America, and which may be compared with the Tiger in size, strength, and fierceness, and with the Leopard in the beauty of its fur, and the gracefulness of its movements.

The Jaguar is a native of South America, in the warmer parts of which country its fierce and savage habits render it an object of terror and dislike. It is found almost all over the southern division of the American continent, but it is now seldom met with in the neighbourhood of towns, partly owing to the many enemies it makes in consequence of the ravages which it commits among the flocks, and partly on account of the great value of its skin; both these causes occasioning its destruction.

The Jaguar is cunning as well as violent. Watching secretly for its prey, and darting upon it unawares, it strikes it to the ground, and then bears it away to a place of safety, where it devours it at leisure. When driven by hunger it will attack man, but is alarmed at any show of resistance, and has a great dread of fires, which are sometimes lighted to keep it off. It is very expert at climbing trees, and is an excellent swimmer. Though very much like the Leopard in many respects, the Jaguar may be distinguished from that beautiful creature by its thicker and more clumsy body, and shorter limbs and tail. The spots on its sides and haunches are larger, and are generally marked with one or sometimes two black dots towards their centre. The Spaniards, and even the native Indians, sometimes hunt the Jaguar for sport.

It frequently measures from four to five feet from the nose to the root of the tail.

---

### THE DOMESTIC CAT.

THE effects of careful training in softening the temper and improving the manners may be observed in the Cat. The wild cat of this country has been called, from its fierce habits, the British Tiger; while the tame cat, which is here represented, is a gentle creature, and often becomes a favourite with each member of the family in which it lives. It is fond of warmth, and likes to lie close to the fire during the winter. It is fond of being noticed, and, when caressed by those who are kind to it, shows its pleasure by purring. Its sleep is very light, being disturbed by the slightest noise. If frightened or attacked, it raises its back and shows its teeth; the hair stands out from the skin; the tail appears suddenly to increase in size; and the animal

utters a harsh and disagreeable growl. Its use in destroying rats and mice is well known. These it seizes suddenly, having watched its opportunity, and concealed its design by slow and stealthy steps. It is so fond of fish, that, much as it dislikes to wet its feet, it has sometimes been known to plunge into water after them.

The Cat is attached to the places to which it is accustomed, and has been known to travel some miles, and even to cross rivers, to return to its own dwelling.



It has the character of loving places more than persons, but if kindly treated is grateful and affectionate. Pennant relates, that Henry Wriothesley, Earl of Southampton, having been confined for some time in the Tower on a charge of high treason, in the reign of Queen Elizabeth, was surprised by a visit from his favourite cat, which reached him, as it was said, by descending the chimney of his apartment.

The Cat is a very kind mother, and shows much attention to its kittens. It has also been seen to nurse, with great tenderness, the young of other animals, whose nature is different from its own, such as hares and squirrels.

The ancient Egyptians, “professing themselves to be wise, became fools,”\* and paid great honours to the Cat. Many specimens of this animal, in a mummy state, are preserved in the British Museum.

---

### THE SHEPHERD'S DOG.

THE faithful Dog is not only the servant of man, but also his friend and companion. So many good qualities meet in the character of the Dog, that volumes full of interesting accounts might be written on its habits and history; and certainly none of the several species surpass the Shepherd's Dog in courage, fidelity, perseverance, and affection for its master.

Some writers have thought that this race is the original one from which all the other varieties of dogs have sprung. Whether Buffon and others be right in this opinion, we will not argue. Certainly the creature before us is of an excellent stock—perhaps it is of the most ancient. Its manners and habits betoken a great degree of intelligence; and even the young dogs of this breed, before they have been trained, appear ready to perform the services of their elders, or, as the shepherds say, “A thorough-bred one will take to them naturally.”

The services of the Sheep-dog must have been noticed by most of our readers. On the moors and mountain-sides of Scotland and Wales, and on the widely-extended downs of Wiltshire, vast numbers of sheep are committed, with confidence, to the care of a single dog. In Scotland,

\* Rom. i. 22.

particularly, where the flocks are liable to be lost in snow-wreaths, this watchful guardian is ever on the alert, and almost always successful in preserving its helpless charge from injury. It is interesting also in the crowded streets of London, and other cities, to observe the quickness with which the drover's dog catches its master's wishes from his looks, and then directs the flock accordingly, or brings the troublesome part of it into order.



The earliest allusion to the Dog in the Sacred Scriptures, occurs during the sojourn of the Israelites in Egypt. "Against any of the children of Israel shall not a dog move his tongue."\* It is mentioned in the Mosaic law† and in other parts both of the Old and New Testament, in a manner which seems to show the contempt and aversion in which this animal was held. For some remarkable instances of this, see 1 Samuel xvii. 43;

\* Exod. xi. 7.

† Exod. xxii. 31.

2 Kings viii. 13 ; Ps. xxii. 16, 20 ; lix. 6, 14 ; Prov. xxvi. 11, 17 ; Matt. vii. 6 ; xv. 26, 27 ; Phil. iii. 2 ; 2 Peter ii. 22 ; Rev. xxii. 15. But it must be remembered that as dogs in the eastern parts of the world were not domesticated, their better qualities did not appear.

## THE NEWFOUNDLAND DOG.



THE Newfoundland Dog is a general favourite. Though it has not the powers of scent which we find in the hound or pointer, nor the swiftness of the greyhound, it possesses many good and useful qualities, such as sagacity, patience, strength, and good temper. Its faithfulness also, in guarding its master's property, deserves to be remarked. Many a skulking thief has

looked upon a fine Newfoundland Dog as one of his worst enemies. Fierce as this animal is at night, particularly when it hears strange noises about its owner's premises, it is by day, and when at liberty, gentle and affectionate, quietly bearing the insults of smaller dogs, and, even of curs, and suffering itself to be teased by children, almost at their pleasure.

Its memory, of which some remarkable instances are recorded, is very retentive. Mr. Bell mentions a fine Newfoundland Dog kept at an inn in Dorsetshire, which was accustomed every morning as the clock struck eight, to take in his mouth a basket placed for the purpose, and containing some pence, and to carry it across the street to a baker's, who took out the money, and replaced it by a certain number of rolls. "With these, Neptune hastened back to the kitchen, and safely deposited his trust; but what was well worthy of remark, he never attempted to take the basket, or even to approach it on Sunday mornings." \*

As a swimmer, the Newfoundland Dog affords valuable aid in retrieving the water-fowl that have been shot; but its noblest service is sometimes rendered in rescuing human beings from a watery grave. In Newfoundland, (the island from which it takes its name,) it is used for drawing loads of wood, and other articles, on sledges, over a wild and rugged country; a task which it performs, as it does everything it undertakes, with cheerful industry.

---

## THE ESQUIMAUX DOG.

THE Esquimaux are a people inhabiting the remote parts of North America. They have no fixed abode, but rove from place to place. Their chief employment is hunting and fishing; and they keep a great many large,

\* Bell's British Quadrupeds.

well-trained dogs, which are used to drag their sledges over the snow in winter. The Esquimaux Dog is as valuable to these rude tribes as the rein-deer is to the Laplander. When drawing a sledge, the dogs have a simple harness of deer or seal-skin round the neck, with a single thong which passes over the back, and is attached to the sledge as a trace. A number of dogs are thus yoked to the sledge, which sometimes contains several



persons, who are thus drawn, at the rate of seven or eight miles an hour, over a large tract of ground,—perhaps sixty miles a day.

It appears, by an interesting account given by Sir E. Parry of his Second Voyage, that the most spirited and sagacious dog is selected as the leader in this remarkable team, and is generally placed from eighteen to twenty feet from the fore part of the sledge; the hind-

most dog, which is the least efficient, being harnessed at about half that distance ; so that, when ten or twelve are running together, several are nearly abreast of each other. The driver sits low on the front of the sledge, with his feet overhanging the snow on one side, and having in his hand a strong and flexible whip, with which he keeps the dogs properly to their work, though the actual application of it is seldom necessary ; as the leader understands his master's voice, and turns to the right hand or to the left accordingly. If the driver wishes to stop the sledge, he calls out "Wo woa!" as our carters do. When he has succeeded in stopping his dogs, he stands up, with one leg before the foremost cross-piece of the sledge, and laying the whip gently over each dog's head, he makes them all lie down.

When we consider the uses to which the faithful Dog is applied, and the labours it willingly undergoes for man, we should not only treat it kindly, but be thankful to God, who has given it such various instincts, and so many valuable qualities for our benefit.

---

### THE WOLF.

THIS animal is of the dog tribe ; but it is generally larger, stronger, and more muscular than the dog. The outward marks of difference, however, are not so striking as those of temper and habits. It has no good qualities, and has therefore been generally detested and feared. The only part about it of use and value is its skin. The poet Thomson has, in a few words, drawn a just picture of this savage creature :—

"Cruel as death, and hungry as the grave ;  
Burning for blood, bony, and gaunt, and grim."

In countries where Wolves are numerous, whole droves flock down from the mountains, or out of the woods, and

join in the work of havoc and mischief. They attack the sheepfold, enter the villages, and carry off sheep, lambs, hogs, calves, and even dogs. The horse and the ox are frequently overpowered by their numbers, and man himself sometimes becomes their victim. They are most terrible in winter, when the cold is severe, the snow on the ground, and their usual food difficult to procure. They are found in most countries of the old and new



continent. Captain Franklin met with some white Wolves in his explorations of the Polar regions. In Europe their numbers are much diminished, in consequence of the increase of population, and the extension of agriculture. They were once very formidable in England. King Edgar, who began to reign A.D. 959, took great delight in hunting Wolves, and encouraged his subjects to destroy them; and he changed

a heavy tax, which had been imposed on one of the Welsh princes, into a tribute of 300 wolves' heads.

Though generally so fierce and savage, yet, by care and kindness, Wolves have sometimes been so tamed, and altered in disposition, as to be rendered even affectionate to man. Mr. Bell, in his History of British Quadrupeds, relates an interesting case of a Wolf, which, on seeing him and others whom it knew, would come to the front of the cage to be fondled, and bring its young ones forward also, that they might share in the kindness shown towards it.

Reference to the Wolf is made in several passages of Holy Scripture. The first mention of it is in Gen. xlix. 27, in which the dying patriarch Jacob says of his youngest son, "Benjamin shall ravin as a Wolf," &c., a passage which the history of the tribe of Benjamin sufficiently explains. The reader will find other allusions to the Wolf in Isaiah xi. 6; Jer. v. 6; Ezek. xxii. 27; Hab. i. 8; Zeph. iii. 3; Matt. x. 16; Luke x. 3; John x. 12; Acts xx. 29.

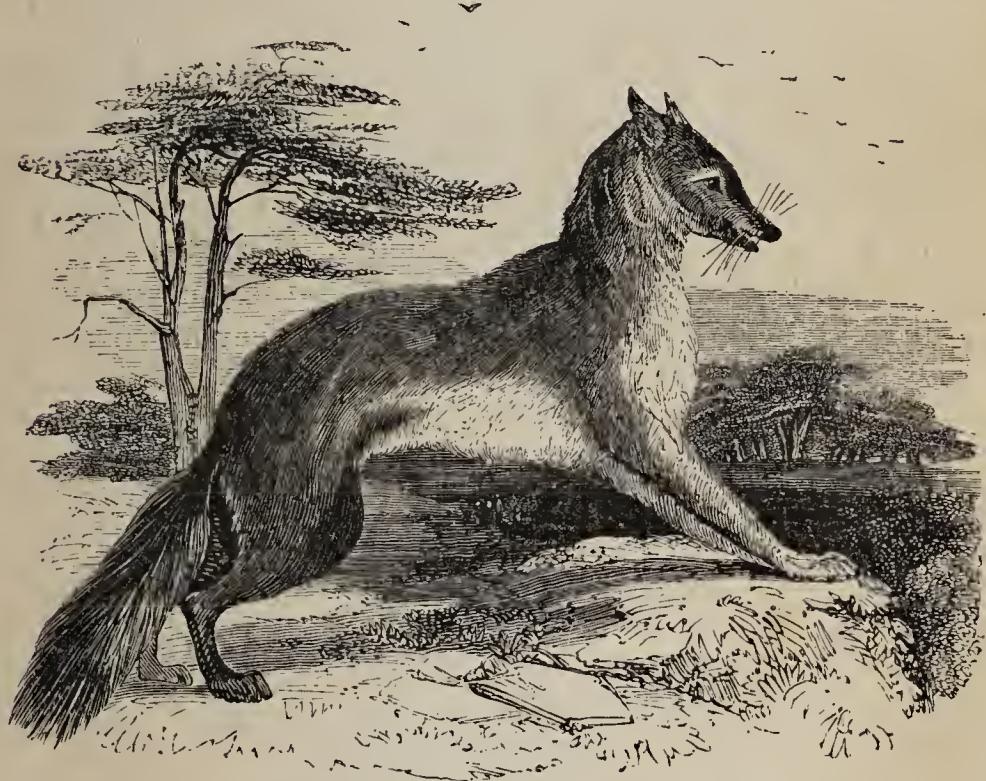
---

## THE JACKAL.

THIS mischievous and ill-favoured creature is a native of Asia and Africa. In the warmer regions of those parts of the world, it takes the place of the wolf, resembling that formidable animal both in its temper and appearance. Unlike the sullen solitary wolf, however, or the sneaking fox, the Jackals live in troops, which burrow together in the earth, hunt together, and unite for their mutual defence. These dangerous bands not only prey upon the smaller quadrupeds, and domestic poultry, but attack larger animals. They frequently follow in the train of more noble beasts, and make a meal off the remains of carcases which have been partly devoured by the lion, the tiger, or the leopard. The

Jackal, it has been thought, is in the habit of finding prey for his superiors in the desert or the forest ; and he is thence sometimes called the lion's provider.

Though fierce and shy in a wild state, the Jackal, when taken, becomes mild and docile. In a description of the Tower Menagerie, in 1829, it is said of the Jackal : "The specimen in the Tower is remarkably quiet : it is a male, and has been a resident for upwards of three years."



The Jackal is supposed by some writers to be mentioned in the Old Testament under the name of the Fox,—an opinion in a great degree supported by a passage in the tenth and eleventh verses of the sixty-third Psalm :—“Those also that seek the hurt of my soul ; they shall go under the earth, let them fall upon the edge of the sword, that they may be a portion for foxes.” The Hebrew word translated, Fox, means an animal which burrows or makes holes in the earth. Now the

fox does not prey upon dead bodies ; but Jackals do, and in those countries in which they abound, it is found necessary to dig very deep graves, and to cover them over with thorns to prevent the dead from being dug up and devoured.

---

### THE COMMON FOX.

THERE is no creature so frequently mentioned for its cunning as the Fox. Its sly and suspicious appearance agrees with its habits and manners. Crafty to a wonderful degree, it thrives by nightly theft ; and since the period in which wolves abounded in this country, the Fox has been the worst pest among the young lambs and the poultry. It forms its burrow near a wood, in the neighbourhood of some village or well-stocked farm ; it then prowls abroad at night, and having scented its prey, moves forward, trailing its body along the ground. It leaps over walls, or creeps in underneath, and having reached the objects of its attack, puts them all quickly and silently to death. These it hides under bushes or herbage, or carries off to its kennel. If other food fails it, it makes war against birds, rats, field-mice, serpents, lizards, toads, and moles, and in this respect is often found useful to the farmer. We must not omit to mention the tenderness with which the female Fox watches over her young, and provides for their wants. This maternal feeling has often been found to prevail over the natural wiliness of her character.

When pressed by hunger, the Fox devours roots and insects, and even shell-fish. In France and Italy it does great mischief by feeding on grapes. Its taste for these luxuries has been noticed in the ancient and well-known fable of "The Fox and the Grapes,"—words which

have passed into a proverb. The various tribes of animals seem to be leagued against the Fox ; and it is probable that its race would have been long ago extinguished in England, were it not required for the chase. It affords pastime to the huntsman : but we have no right to distress and torment any animal for our sport. Its fur is valuable.

We find this animal referred to in the New Testament in very affecting terms. Our Lord, in alluding to the



privations which He underwent for man's sake, said, "Foxes have holes, and the birds of the air have nests ; but the Son of Man hath not where to lay His head."\* The craftiness and rapacity of Herod are reproved in the words, "Go ye, and tell that Fox," &c.†

\* Matt. viii. 20.

† Luke xiii. 32.

## THE STRIPED HYÆNA.



THE Hyæna, is generally of the size of a large dog. It is a gloomy, ill-looking animal; and its manners and habits correspond with its appearance. The striped Hyæna, represented in the engraving, inhabits Barbary, Egypt, Abyssinia, Nubia, Syria, and Persia. The men of these countries hold it in utter scorn, and would account it a disgrace to hunt or slay it, though they have no objection to see it killed with sticks by women. The Spotted Hyæna, a more formidable animal, is chiefly found in South Africa. Hyænas live in caverns and rocky places; and prowl about in the night to feed on the remains of dead animals, or on whatever living prey they can seize. When other food fails, they live on plants and the tender shoots of trees. Their cry is loud and disagreeable: it is like the

moaning of a human voice ; and some of the inhabitants of the Cape of Good Hope say that the animal thus sometimes deceives people, and succeeds in carrying away lambs, calves, and sheep from the folds. Its disposition and form are implied in the name by which it is sometimes known, the Tiger-wolf.

Comparatively few instances have occurred of the Hyæna being tamed. Mr. Pennant, however, reports that he saw one as tame as a dog : Buffon says that a tame Hyæna was shown at Paris ; and Shaw speaks of having seen the natives take Hyænas by the ears, the creatures offering no other resistance than that of drawing back. Ill tempers and bad manners undoubtedly become worse by the harshness and neglect of superiors ; and the mingled scorn and disgust with which the Hyæna has always been viewed have probably tended to increase its ferocity.

Bruce, in his Travels in Abyssinia, states some curious facts regarding this creature. "The Hyæna," he says, "was the plague of our lives, the terror of our night walks, and the destruction of our mules and asses."

---

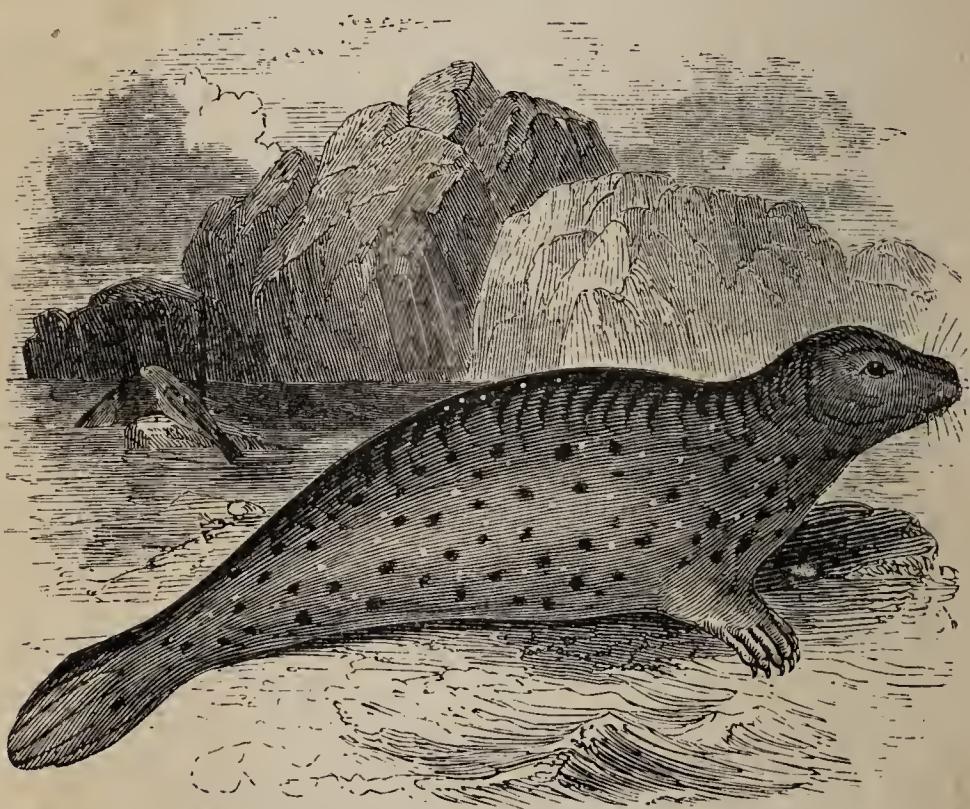
### THE COMMON SEAL.

WRITERS on Natural History have remarked that the form of this animal's head indicates much intelligence ; and facts which have been recorded confirm the remark. M. Frederic Cuvier mentions a Seal which readily obeyed a number of orders given to it by its master, to whom it appeared to be exceedingly attached. It would rise on its hinder feet, shoulder a stick as a musket, lie down on the right or left side, and perform several other feats.

The docility of Seals is no new discovery. Pliny,\* a Roman naturalist, who flourished A. D. 66, and wrote

\* This writer, who, besides other works, composed a Natural History in thirty-seven books, perished from the effects of an eruption of Vesuvius, which curiosity had led him to witness too near the scene.

in Latin, says of them, “ They receive discipline ; they know people by their look and voice ; they answer to their names.” They are stated by Low, in his *Fauna Orcadensis*, to have a large share of curiosity : for if people are passing near them in boats, they often come close to a boat and follow it ; and when they hear loud talking, they put on looks of wonder and inquiry. They are exceedingly valuable to the Greenlanders, who



use their flesh for food, and their fat for oil. The skin not only serves for clothing, but as a covering for boats. In this country the skin is tanned for various purposes, and is sometimes dressed with the fur on, and made into caps.

Seals are classed among British quadrupeds, being found in the Orkney and Zetland Isles. They also occasionally frequent the Tees, and commit havoc among the salmon.

Lord Teignmouth, in his Sketches of the Highlands and Islands of Scotland, says that these animals breed in immense quantities on a small rocky island called the Stacks of Skerries. In the centre of the island is a lake, on the banks of which the Seals are found basking in multitudes with their young. As soon as they are alarmed by the approach of their enemies, they congregate, form a body, and scuttle away across the land to the sea. The men divide and charge the retreating column on both flanks with large sticks. A blow on the nose of the Seal kills it instantly. Many of them are taken in nets.

---

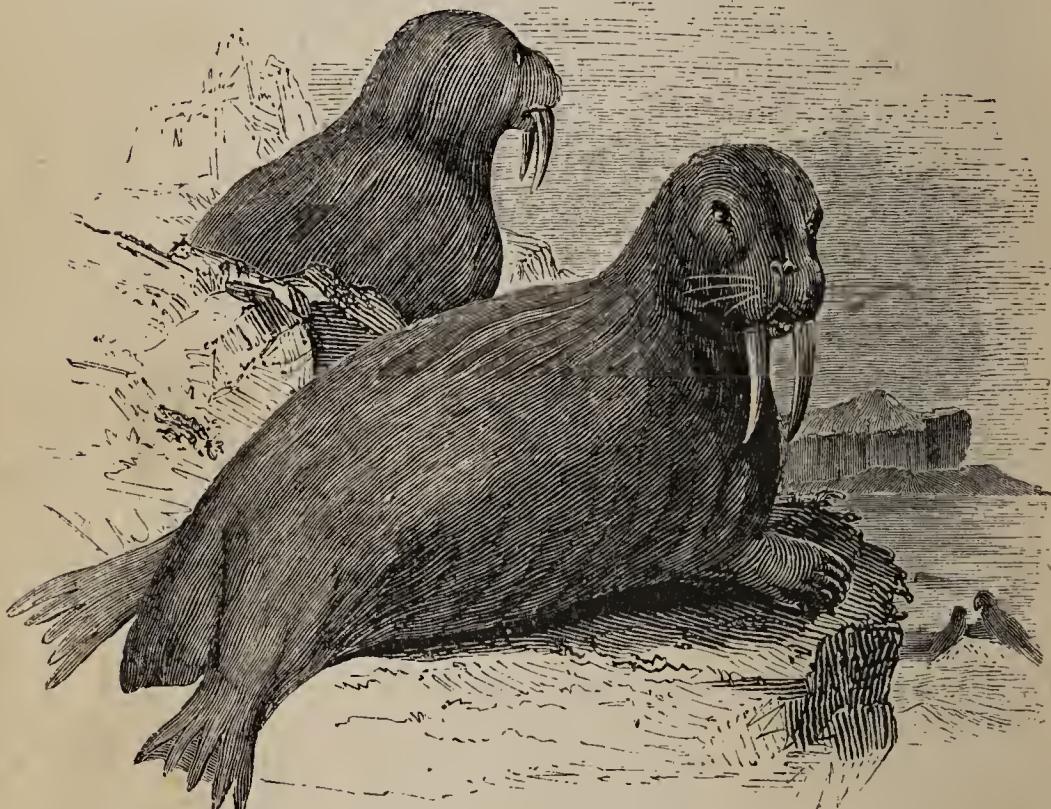
### THE WALRUS.

THIS extraordinary animal, which is sometimes called the Morse, the Sea-cow, or the Sea-horse, is found, like the Seal, only in the colder regions. It frequently visits the shore, or the ice, and remains there for days together, until driven back to the sea, either by fear or hunger. At the first approach of danger, it makes for the element in which it lives, and where it moves with greater comfort and freedom than on dry land. The Walrus is a gregarious animal, and herds of them are found by the hunters consisting of forty, eighty, or a hundred in number. They are often killed on land at Spitzbergen, and other northern coasts, for the sake of their oil, and the ivory of their tusks.

The capture of the Walrus on land is less frequent than formerly, partly, perhaps, from the reduction in its numbers, and partly from its having been taught greater caution, by its ingenious pursuer, man.

It is ranked with the Seals among carnivorous, or flesh-eating animals; and fish, probably, forms a portion of its food; but Professor Bell notices the form and

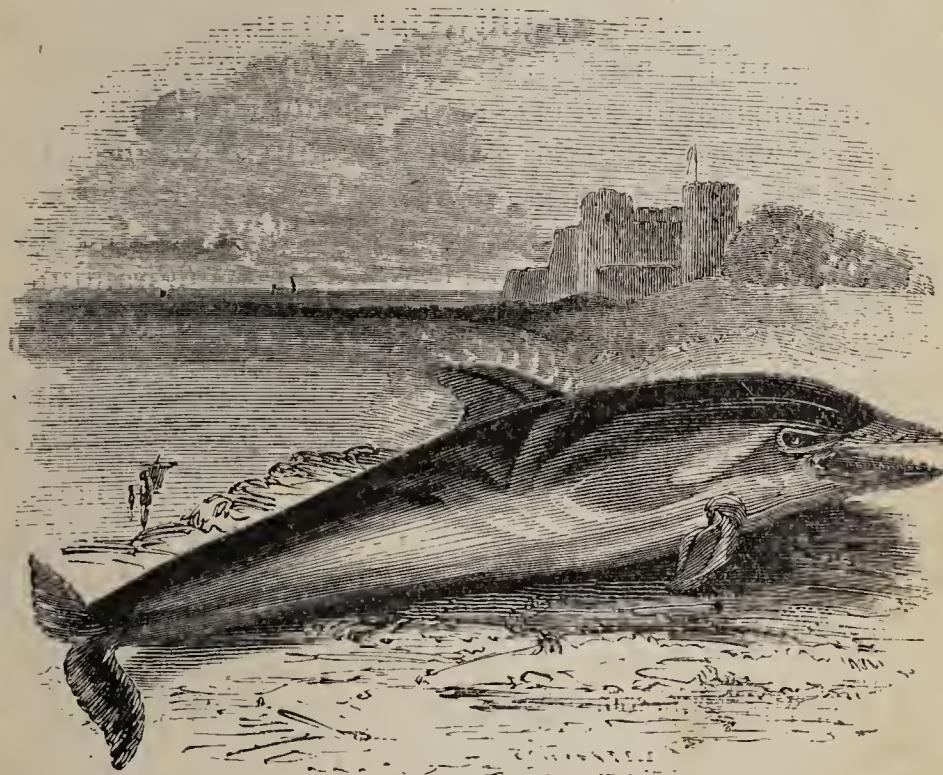
structure of its jaw-teeth, which “are calculated rather to bruise the half-pulpy mass of marine vegetables, than to hold and pierce the slippery hardness of the fish’s scaly cuirass.” The canine teeth, directed downwards, are extremely long and powerful, and are valuable for defence. When attacked, it is fierce and violent,



especially if its young ones are with it. It will then rise and endeavour to sink or overset the boat by means of its tusks.

The Walrus is, at its birth, about the size of a pig of a year old ; when full grown, it is as large as an ox. Two or three instances are on record of the Walrus having been found on the coasts of Britain.

## THE DOLPHIN.



MANY interesting, but fabulous, stories are told of the Dolphin in the writings of the ancient classic authors. Peculiar traits in the character of any animal formed sufficient grounds for those who had “gods many, and lords many,”\* to assign to it supernatural qualities and attributes; and thus “the beasts that perish”† had their share, with the heathen divinities, in the homage and estimation of men unenlightened by Gospel truth.

These remarks may be applied to the Dolphin, whose habits have probably given rise to the strange tales which have been invented respecting it. Professor Bell says : “The excessive activity and playfulness of its gambols, and the evident predilection which it evinces for society,

\* 1 Cor. viii. 5.

† Psalm xlix. 12.

are recorded by every mariner. Numerous herds of them will follow and surround a ship in full sail, with the most eager delight, throwing themselves into every possible attitude, and tossing and leaping about with elegant and powerful agility, for no other apparent purpose than mere pastime. It is, however," he adds, "a voracious, and even gluttonous animal;" and the eagerness with which it follows a ship may, in some measure, arise from the hope of obtaining food.

The amiable and pious Bishop Heber, in his Journal of a voyage to India, has the following memorandum, on Sunday, July 13, 1823 (about a month after he had embarked from England for his diocese). "We had divine service on deck this morning. A large shoal of Dolphins were playing round the ship, and I thought it right to check the harpoons and the fishing-hooks of some of the crew. The wanton destruction of animal life seems to be precisely one of those works by which the sanctity and charity of our weekly feast would be profaned. The seamen took my reproof in good part, and left the mizen-chains, where they had been previously watching for their prey."

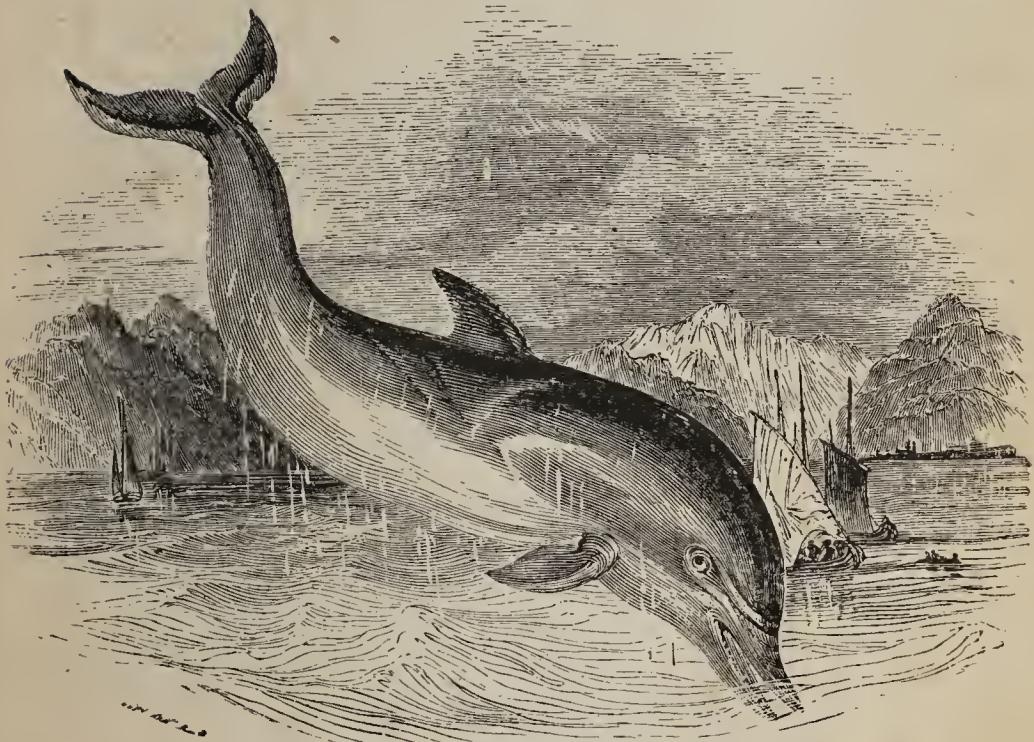
The flesh of the Dolphin was formerly considered a delicacy, and served up like that of the porpoise, with a sauce composed of crumbs of bread, sugar, and vinegar; but these animals are now excluded from the table.

The female Dolphin produces but a single young one at a time, which she nurses and suckles with great tenderness and care. The mother lies partly on one side, to enable both herself and her offspring to breathe easily, while the suckling is going on. The milk is plentiful and rich.

The general length of the full-grown Dolphin is from six to eight or nine feet. The outward orifice of the organ for hearing is scarcely larger than a pin-hole.

---

## THE COMMON PORPOISE.



ANIMALS of the order *Cetacea*, such as whales, dolphins, and porpoises, living as they do in the sea, were formerly arranged under the order of fishes; and even Linnæus, following Ray, classes them so; but their structure and habits, when scientifically considered, entitle them to a place among British quadrupeds, inasmuch as they have all the essential characters of mammiferous animals: they have warm blood, and a complete double circulation; they breathe the air by means of true lungs; they bring forth their young alive, and nourish them tenderly and carefully with their milk.

The Porpoise is the most common of the order of *Cetacea* in our seas. Its name is derived from the

French, *Porc-poisson*, which answers to the term sometimes given to it, of Sea-Hog, or Hog-fish. These animals make their appearance in herds of various numbers, playing and tumbling with much agility. On the approach of a storm, when the sea begins to be disturbed, they may be seen taking their pastime, as if enjoying that state of the ocean which is so threatening to the mariner. They then show their black backs above the surface, and, either in sport or in pursuit of their prey, sometimes leap out of the water.

The Porpoise is found in several latitudes, and chiefly frequents our coasts and friths in the autumn and spring. On the western coasts of Ireland, and among the Western Islands of Scotland, they are met with in vast numbers. They ascend our rivers in pursuit of fish, and have frequently been seen in the Thames above London-bridge. They are sometimes caught for the sake of their oil. Two were taken in the Wareham River, which, together, yielded sixteen gallons. One of them was found to have milk, which tasted salt and fishy. The total length of the Porpoise is from four to eight feet.

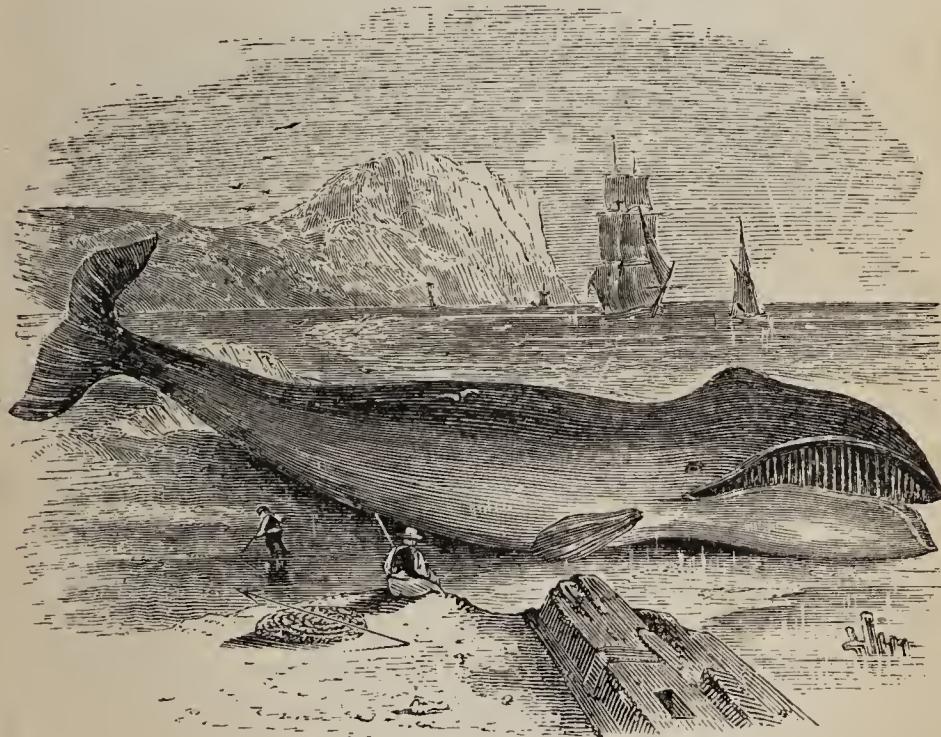
---

### THE COMMON WHALE.

THE usual length of the Common Whale is from 50 to 60 or 65 feet, and its greatest circumference is from 30 to 40 feet. The head is very large, being about 16 or 17 feet long, by 10 or 12 broad, and measuring about one-third of the entire length of the fish. There are no teeth. The layers of whalebone, which fill the cavity of the mouth, are arranged in two rows, of about three hundred each. These act as strainers for the prey on which the animal lives. When a Whale is taking food, its vast mouth being opened, large quantities of small fish and sea-insects are inclosed; and, on

the mouth being shut, the water passes away, leaving these caught, as in a sieve, for the purpose of the creature's nourishment.

The whalebone is a very valuable and well-known article of commerce; but the chief object of pursuit in Whale-fishing is the oil, yielded by the blubber or fat. For this purpose, a great many vessels are sent every year to the Northern seas, particularly to Davis's Straits. The blubber of a Whale sixty feet long will yield more than twenty tons of pure oil.



The dangers which attend the pursuit of the Whale, are truly frightful. Some of the men employed in the service fall victims to the intense cold of an Arctic winter, or to the combined effects of cold and hunger. The vessels are occasionally wrecked by icebergs; and accidents sometimes occur in the act of attacking the Whale, which, on finding itself struck with the harpoon, often lashes violently with its tail, and destroys the boat, or

sinks rapidly into the deep, causing a whirlpool which may prove fatal to the whalers.

The female of this species, like most others of the Whales, is much attached to her young, and is ready to rush on danger, and even death, to rescue or defend her helpless charge. Thus, if a young one is harpooned, the mother generally follows, as if to help, but, in fact, almost always to perish with it.

The Whale has usually but one young one at a time. The young Whale, at its birth, is about ten or twelve feet long.

Mention is made of the Whale in several parts of Holy Scripture. See Gen. i. 21; Ezek. xxxii. 2; Matt. xii. 40.

---

### THE FIN WHALE, OR RORQUAL.

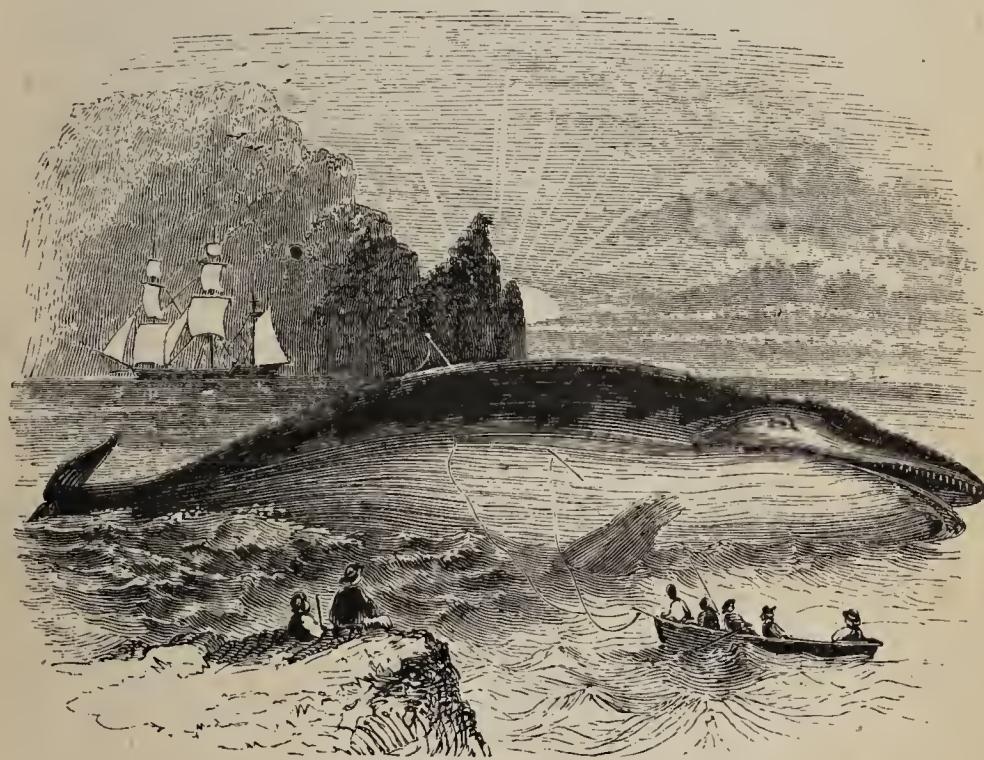
THE Rorqual is the largest of all Whales, and consequently is of all animals the largest that we know of now in existence. It sometimes reaches the enormous length of eighty or even a hundred feet. Its food consists not only of the small animals on which the Common Whale subsists, but also of fish of considerable size.

The blubber of the Rorqual does not, in most instances, yield oil in sufficient quantities to make this powerful and active creature a great prize to the Whale-fishers.

Its habits are different from those of the Common Whale. It is less quiet in its movements, seldom lying motionless on the surface of the water, but making way at the rate of about five miles an hour. When struck by the harpooner, the suddenness of its descent is such as very frequently to break the line. At other times, the rapid rising of the wounded creature for breath, the violent movements which its agony occasions, the

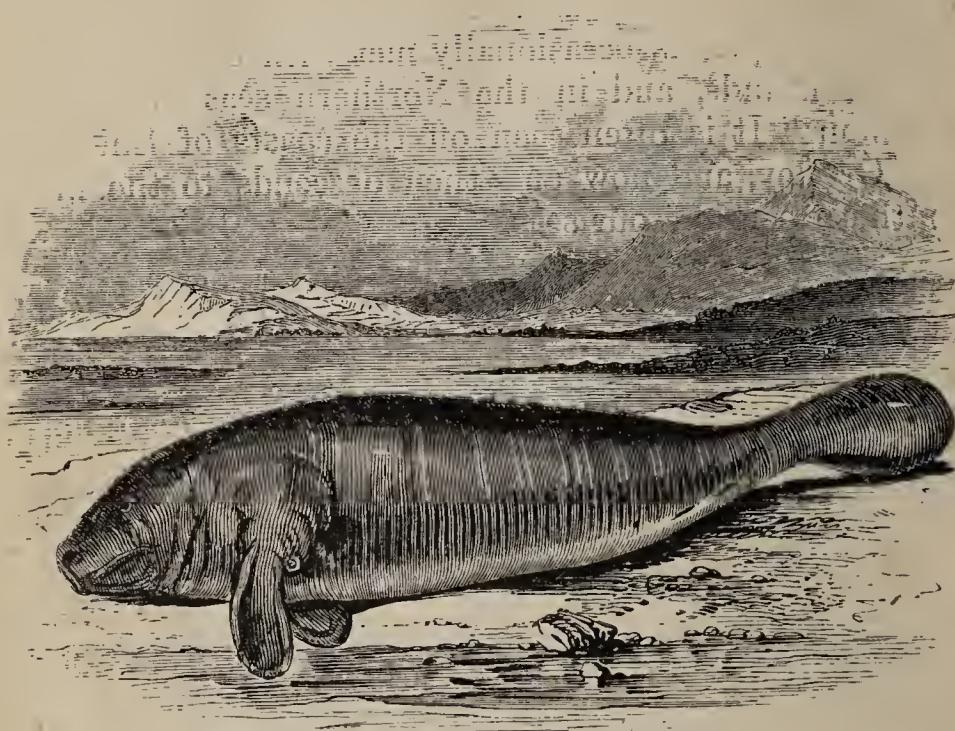
brandishing of its vast tail, or the whirlpool produced by its sinking, have either of them been known to cause the destruction of boats venturing too near.

The Rorqual is occasionally met with on the shores of our islands, and in the Northern seas it is very common. It is often seen off the coasts of Shetland and Orkney, and now and then descends to the more southern parts of our seas.



The enormous skeleton which was exhibited, in a temporary building erected for it, near the Royal Mews, Charing Cross, some years ago, belonged to this species. It had been towed into the harbour of Ostend. The following are the measurements of that specimen :— Total length, 95 ft. ; breadth, 18 ft. ; length of head, 22 ft. ; length of spine, 69 ft. 6 in. ; breadth of tail, 22 ft. 6 in. The weight of it when taken was 249 tons, or 480,000 pounds, and 4,000 gallons of oil were extracted from the blubber.

## THE AMERICAN MANATEE.



THE Manatee is of the tribe entitled *Aquatic Pachydermata*. In its appearance it resembles a whale, but it differs from the whale in one important respect. All animals of the order *Cetacea*,\* or true Whales, are carnivorous; but the Manatee is herbivorous, feeding exclusively on herbage, which it finds in the sea or on rocks. It sometimes makes its way up rivers; and, by means of its powerful flippers, which are seen in the annexed print, crawls along the shore, either to bask in the sun or to search for vegetable food. The skin of the Manatee, like that of the well-known porpoise, is bare, smooth, and oily, and covers a layer of blubber or fat. This species of Manatee measures from six to seven feet in length. The eyes are small; the opening for hearing scarcely perceptible. From the shoulders the body gradually diminishes in girth, and ends in

\* From a Greek word, signifying a Whale.

a flat oval kind of paddle. The American Manatee inhabits the mouths of the Amazon, Orinoco, and other rivers of South America. The Senegal Manatee is met with in Western Africa ; whilst another kind has been seen on the shores of some parts of North America.

Like the Dugong, another of the *Herbivorous Cetacea* of Cuvier, the Manatee is remarkable for conjugal affection. The female is tenderly attached to her young, which she carries under her flippers. Should one of a pair of these creatures be killed, the survivor follows after the boat which carries the body of its "mangled mate ;" and thus often shares the fate of its partner. Indeed, if one be taken, the other becomes an easy prize.

The flesh of the Manatee is well flavoured, and when properly preserved and salted will remain sweet for a year. The skin is exceedingly thick and tough, and when tanned, becomes leather of rare solidity and strength.

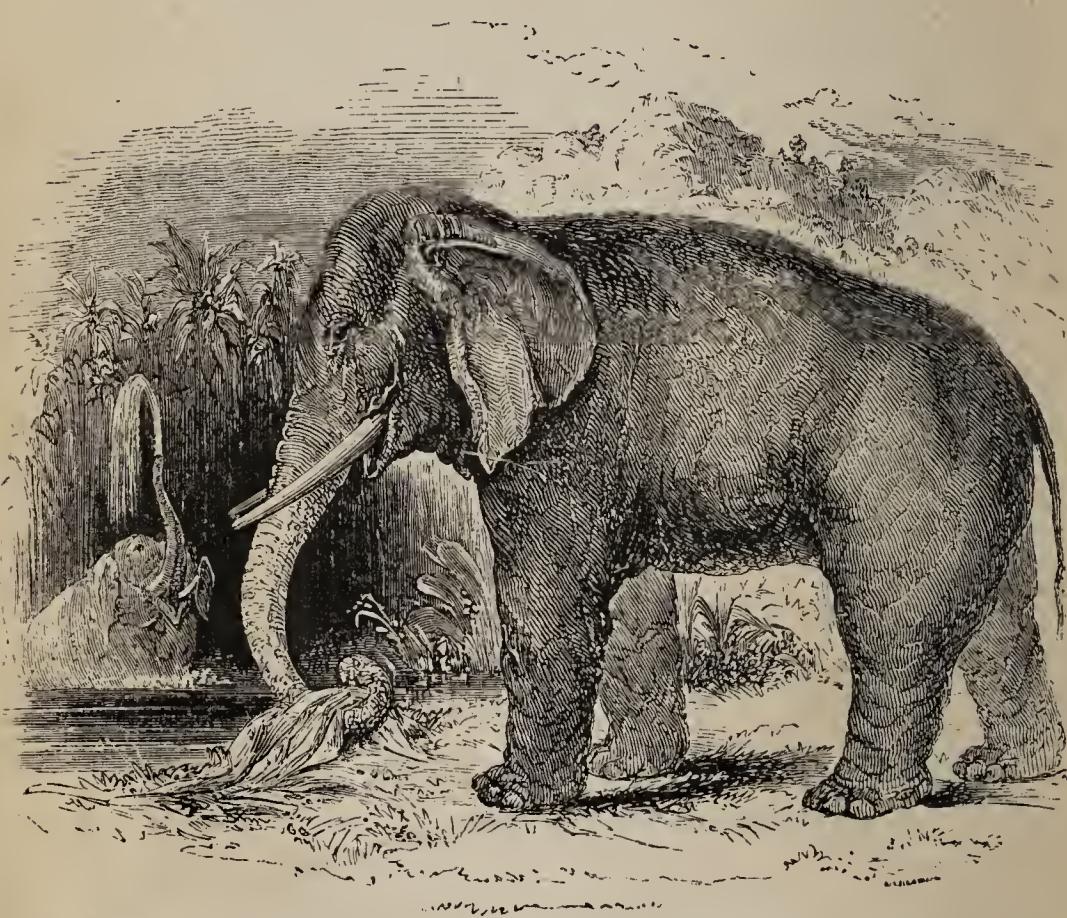
---

### THE ELEPHANT.

THE Elephant is found in Asia and Africa, and possesses many qualities which render it useful to man in those parts of the world. It is strong, active, and persevering ; gentle in disposition and manners ; and so sagacious that it is capable of being trained to various kinds of service. The height of an Elephant is generally nine or ten feet, though often greater. It is strong enough to root up trees, and can also pick up a sixpence or a needle with its trunk or *proboscis*. When it wants to drink, it fills its trunk with water, and empties it into its mouth.

The wonderful facility with which the Elephant applies its trunk to all the purposes of a hand, has greatly attracted the attention of naturalists. "Not only,"

says Buffon, "does the Elephant possess the power of moving his trunk, but he can bend it, shorten it, lengthen it, bend it back, and turn it in every direction. The extremity of this trunk is furnished with a rim, lengthened in front into the form of a finger ; and it is by this means he is able to perform



all that we do with our fingers ; he can pick up the smallest piece of money, gather flowers one by one, untie knots, and open and shut doors, turning the key and forcing back the bolt."

Archdeacon Paley, in his "Natural Theology," speaking of the curious structure and anatomy of the trunk, and its various powers, says, "These properties of the same organ, taken together, exhibit a specimen

not only of design (which is attested by the advantage), but of consummate art, and, as I may say, of elaborate preparation in accomplishing that design."

Elephants are very intelligent, and grow fond of those who treat them kindly. They are much used by princes in India in war and hunting. One of these animals can carry a small building like a tower, with ten or twelve men in it. The driver rides upon its neck, and gives it the word of command. If the "half-reasoning Elephant" arrives at ground that appears insecure, it will not venture on till it has tapped and tried it with its trunk.

It feeds on hay and vegetables, and is fond of sweet-meats, and the smell of flowers.

The ships of Tarshish brought every three years, for king Solomon, ivory, or, as it is called in the margin of the Bible, Elephants' teeth.\* Some writers think that the description of the animal called in the book of Job† Behemoth, applies to the Elephant.

---

## THE HIPPOPOTAMUS.

THE word Hippopotamus is derived from the Greek, and signifies a River-horse. This unwieldy creature is amphibious ; that is, it can live both in water and on land. It measures upwards of ten feet in length, and its girth is often nearly nine feet. Its body is very large, fat, and round ; its legs short and thick ; its head large ; its mouth extremely wide ; its teeth of great strength and size ; its eyes and ears small.

The Hippopotamus is found about the muddy banks of rivers in Africa ; and, like the hog, is fond of wallowing in the mud. If pursued on land, it takes to the water, plunges in, and sinks to the bottom. It

\* 1 Kings x. 12 ; 2 Chron. ix. 21. † Job. xl. from verse 15 to the end.

cannot continue long there without rising to the surface to breathe ; but this, when threatened with danger, it does very carefully, so that the snout can scarcely be seen above water. If wounded, it will rise and attack boats or canoes furiously, and it has been known to sink them by biting pieces out of their sides. During the night it leaves the rivers, to feed on sugar-canies, rushes, millet, or rice.



The caution of this animal is so great, when on land, that it is most difficult to catch it by snares or any other means. One mode is to watch it at night behind a bush, close to its path, and, as it passes, to wound it in the tendon of the knee-joint. We hear also of its having been taken in a pitfall covered with reeds.

The most popular rarity of the year 1850 was the first appearance in England of a living Hippopotamus. The acquisition of this treasure we owe to Abbas,

Viceroy of Egypt, and to the zeal of the Zoological Society of London. This interesting specimen was taken by the hunters commissioned by the Viceroy in August, 1849, in the Island of Tobaysch, on the White Nile, about 2,000 miles above Cairo. It was not captured without the infliction of a wound in its flank, by a boat-hook, and the scar is still to be seen. There is also (Oct. 1858) in the Gardens of the Zoological Society a young Hippopotamus. These huge animals appear to thrive very well in the English climate.

“ We speak of the colossal strength of this formidable animal ; but what is it when compared with the relative powers of some of the insect tribes ? Well may we adore the beneficence of the Creator in not having endowed the larger animals with muscular force proportionable to that of the inferior orders ! A cockchafer is six times stronger, according to its size, than the most powerful horse ; and if the Elephant, as Linnæus observes, were strong in proportion to the stag-beetle, he could uproot the firmest oaks, and level mountains.”—ROBERTS’s *Wild Animals*.

---

## THE WILD BOAR.

THE Wild Boar still infests many parts of Europe, and was formerly to be found in the woods and forests of Britain. Among the severe forest-laws in force in the reign of William the First, there was one by which any person found guilty of killing the stag, the roe-buck, or the Wild Boar, should have his eyes put out ! and sometimes the penalty appears to have been a painful death.

This savage and dangerous animal is met with in Asia ; it is a favourite object of the chase in India, and

is also said to be an inhabitant of Syria, and the northern parts of Africa. It feeds on vegetables, fruit, and different kinds of grain ; though, when stimulated by hunger, it does not reject the flesh of animals. The male lives alone and apart amidst the thickest retreats of the forest, lying concealed during the day, and roaming about in the evening in search of food. The females, on the contrary, unite in large herds with their young, for



the purpose of mutual defence. When attacked, the older and stronger ones form a line against the enemy; the younger and weaker portion of the herd being placed in the rear ; and it is found that the females, though generally quiet and harmless, defend their young with the most determined courage.

The chase of the Wild Boar has for centuries been much followed in Germany, and is considered the more exciting in consequence of its dangerous character. This kind of hunting has furnished a glowing but painful

subject for the pencil of the artist. The long, curved, and sharp tusks of the animal, wielded by the strong muscles of his brawny neck, are capable of tearing open the body of a horse at a single blow. When once at bay, the Boar becomes furious. He turns indiscriminately on his pursuers; and the hunter himself is in no little jeopardy, if he be on foot, or his horse be disabled. At the present day, the Germans do not hunt the Boar on horseback with a spear, but shoot him down with rifles.

The common hog, or pig, derives its origin from the savage and powerful creature represented in the engraving. The ordinary length of the head and body of a Wild Boar of four years old is three feet, the head being nearly a foot in length.

The Wild Boar is one of the quadrupeds mentioned in Holy Scripture. The Psalmist, lamenting the miseries of the Church, which, under a beautiful figure, he compares to a goodly vine, rifled and trodden under foot, complains—"The Wild Boar out of the wood doth root it up; and the wild beasts of the field devour it."\*

---

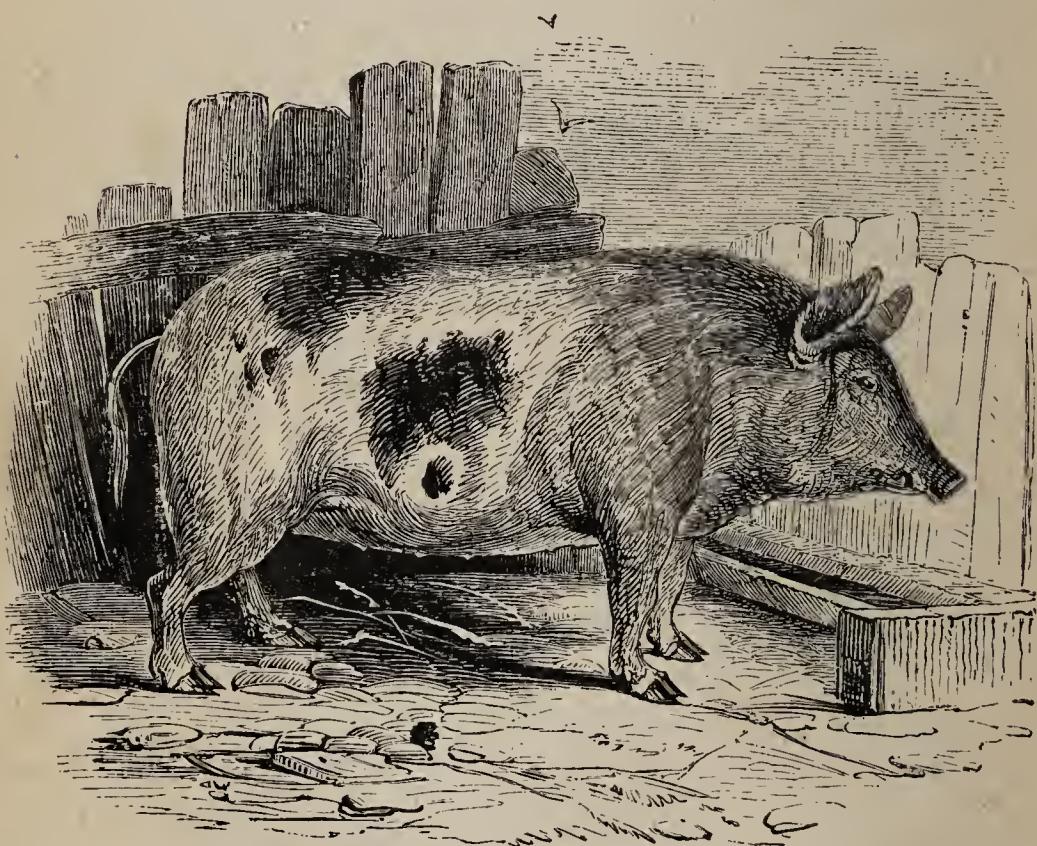
### THE COMMON HOG.

IT is considered by Cuvier, and other naturalists, that all the common varieties of the domestic Hog, except, perhaps, the Chinese, have sprung from the Wild Boar, which was anciently found in nearly every country of Europe and Asia, and also in some parts of Africa. The Hog was not known in America until introduced by Europeans. Of all the English varieties of this creature, that which is met with in the New Forest, in Hampshire, appears to approach the nearest to the original Wild Boar, both in its form and habits; the rapid

\* Psalm lxxx. 13.

movements and courageous bearing of the Forest Hog being very different from those of the heavy animals which we see in the farm-yard and sty. The savage nature, however, of the wild race may be traced in the common English Hog, which, when hungry or irritated, will sometimes attack persons who venture too near it. It will also often rush at dogs, to which it seems to have a particular dislike.

The flesh of the Hog has long been an important



article of food in this country. The Saxons understood its value, and used Hog's flesh largely, preparing it in various ways. Much of the wealth of our Saxon forefathers consisted in herds of these animals, which were tended in great numbers by swineherds, and fed upon acorns or mast in the woods.

After the Norman conquest, less attention was paid to the rearing of swine for domestic purposes.

In modern days the quality of the Hog has been much improved : several counties of England being noted for their excellent breeds. Of these, the Hampshire race is the most famous. Berkshire and Yorkshire are also celebrated for their fine specimens of this very useful animal. For its small compact form, and delicate flesh, the Chinese Hog is in much esteem.

The use of the swine was strictly forbidden to the Hebrews.\* Mention of this animal occurs in the account of one of our Saviour's miracles,† in His parable of the Prodigal Son,‡ and in His Sermon on the Mount.§

Solomon has a striking similitude derived from this creature.|| St. Peter compares those sinners who easily relapse into their former sins to a sow, that, as soon as she is washed, goes again to wallow in the mire.¶

### THE RHINOCEROS.

THE Rhinoceros is a very large ungraceful-looking beast : its usual height is about eight feet, its length ten or eleven feet. When left to itself, it is quiet and inoffensive, but if attacked, is very savage. It has great strength and swiftness. The wounds which it receives are said to heal soon. The skin is dark-coloured, and is so hard and tough, that bullets of lead, when fired at it, have been flattened against it ; but an iron ball, or one formed of tin and lead, will penetrate the skin.

Different species of the Rhinoceros are found in India, Africa, and in the islands of Java and Sumatra. The flesh is sometimes eaten in Ceylon, and in other places ; and the skin, flesh, hoofs, and teeth, are used in medicines. Its food consists of vegetable substances, the leaves, branches, and even trunks of trees. The latter it

\* Lev. xi. 7.

§ Matt. vii. 6.

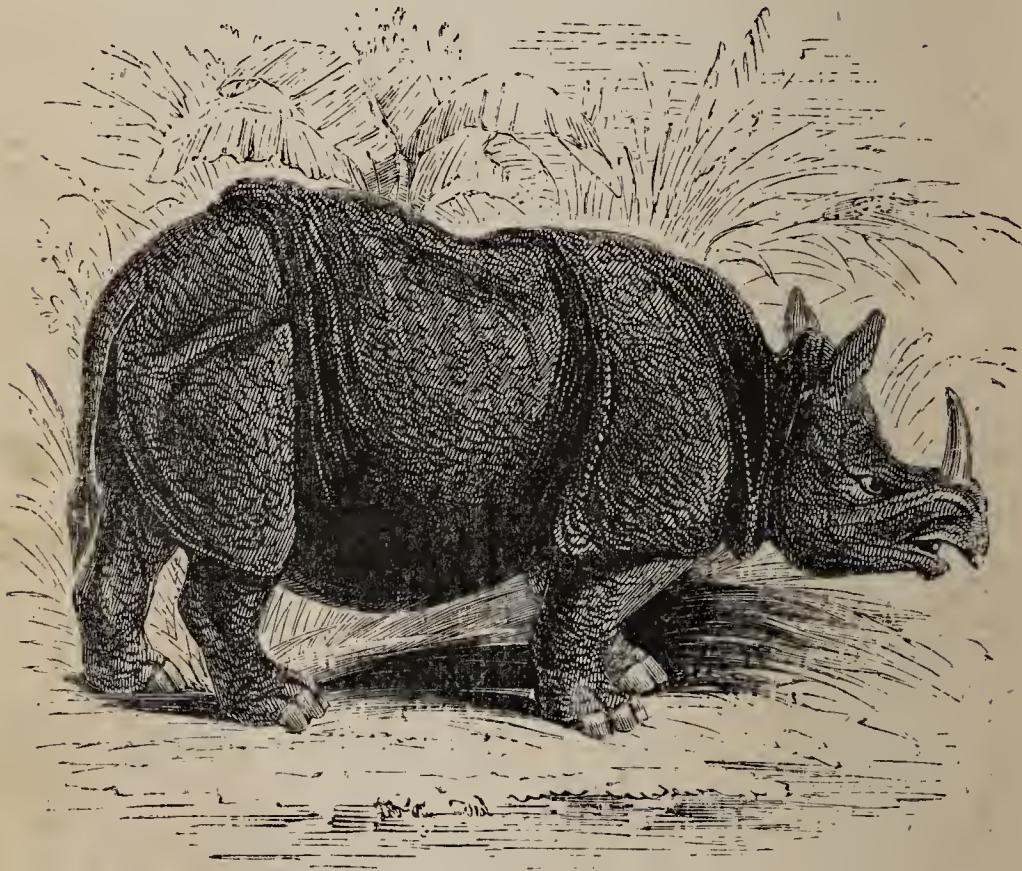
† Matt. viii. 30, 31.

|| Prov. xi. 22.

‡ Luke xv. 15, 16.

¶ 2 Pet. ii. 22.

tears into threads by the help of the remarkable horn which grows on its nose, and from which its name is derived. This horn is entirely different in its formation and mode of growth, from that of any other known animal : it being made up of a bundle of fibres having the appearance of bristles lying side by side, glued together, and attached to the skin.



There is reason to believe that the Unicorn of heraldry had its origin in the imperfect descriptions given of the Rhinoceros by some early travellers ; and we may therefore consider the animal before us to be alluded to in Scripture. The first mention of it, in reference to its great strength, is found in the answer of Balaam when solicited by Balak to curse Israel—" He hath as it were the strength of an unicorn."\*

\* Numb. xxiii. 22; xxiv. 8. See also Deut. xxxiii. 17; Job xxxix. 9—12; Psalm xcii. 10.

The Lion and the Unicorn were first assumed by King James the First, in 1603, as the supporters of the royal arms of England. Before that time there were many changes in the choice of supporters. Queen Elizabeth's were a Lion and a Dragon. The reason of the Unicorn having taken the place of the Dragon was, that James's supporters, as King of Scotland, were two Unicorns.

A fine Rhinoceros is now exhibited in the gardens of the Zoological Society.

---

### THE AMERICAN TAPIR.



THIS remarkable animal is chiefly found in South America. The skin of the Tapir is so thick and tough, that Sonnini, the traveller, says he frequently fired at one which was crossing a river with her young, without causing her to turn aside from her direction, although

he could see the impression made by the ball on her hide. With this coat of mail the Tapir can clear for itself a path through the thickest woods, and snap in two a cord strong enough to stop a bull in its course.

The most common mode of taking the Tapir, is to attract it by an imitation of its voice, which is like a whistle, and so to bring it close to the huntsman's shot. The American Indians sometimes use poisoned arrows, and occasionally dogs, for securing this prey. The flesh, though coarse and dry, is much esteemed by the natives.

The common food of the Tapir consists of wild fruits, buds, shoots, and young plants ; when pressed by hunger it will eat almost anything, such as rags, dirt, and even pieces of wood, and small stones. One of them is stated to have gnawed in pieces a silver snuff-box, which was left in its way, and to have swallowed the contents.

The Tapir is about as large as a calf of six months old. Its body is heavy. Its ears are small. The nose and upper lip are extended into a moveable proboscis, at the extremity of which are the nostrils.

It is not a mischievous animal, but quiet and good-tempered, unless assailed by huntsmen and their dogs, when it defends itself with great courage. Sonnini speaks of tame ones strolling at liberty through the streets of Cayenne, visiting the neighbouring woods, returning in the evening to the houses where they are fed, and showing attachment to those who are kind to them.

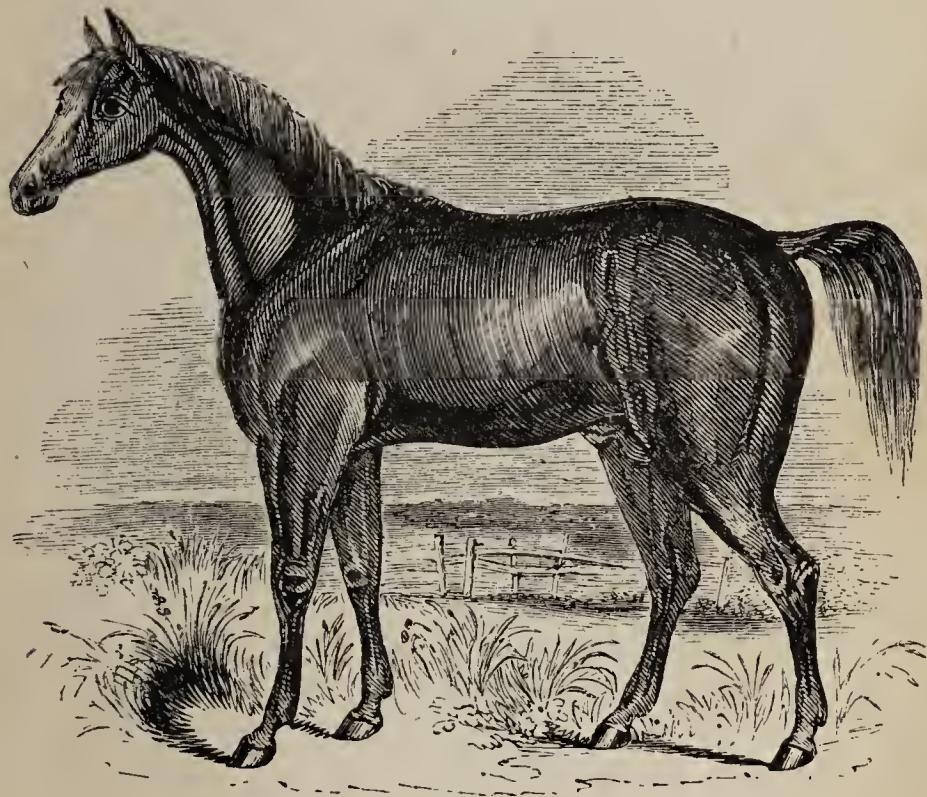
---

## THE RACE-HORSE.

THE Horse has been the servant of man from very early times, and is reasonably supposed to be of Eastern origin. In England, Horses appear to have been always

highly valued. Julius Cæsar, who landed in Kent fifty-five years before Christ, records their fine stature and good training. The native British stock was improved by the importation of fine specimens from Spain, and more recently from Arabia, and other Eastern countries.

The best Race-Horses, more especially, will be found to have sprung from an Arabian origin. It was the



fondness of King James the First for the sport of horse-racing, that occasioned the first introduction of the pure Arabian blood into this country.

The whole riches of an Arab of the desert frequently consist of his beautiful Horse. He does not tie it up, but lets it feed at large round his habitation. Being treated with kindness, it will come running the moment it hears its master's voice, and will lie down in the midst of his children without hurting them. If the

rider happens to fall, his Horse will stand still instantly, and not stir till he has mounted again.

Bingley relates a pleasant anecdote of a poor Arab, who possessed nothing but a favourite courser. After much reluctance, he had agreed to accept a handsome sum of money for his Horse, which was wanted for the use of King Louis the Fourteenth. Having been sent for by the French Consul at Saïd, the poor man arrived with the animal, and dismounted. Looking first at the gold, and then stedfastly at his favourite, he heaved a deep sigh, and exclaimed, “To whom am I going to yield thee up? To those who will tie thee close, and beat thee! Return with me, my beauty, my jewel! and rejoice the hearts of my children.” Then, springing upon her back, he was out of sight in an instant.

Many allusions to the Horse are met with in Holy Scripture. These will be noticed under the next head. There is a fine description of the war-horse in the book of Job.\*

---

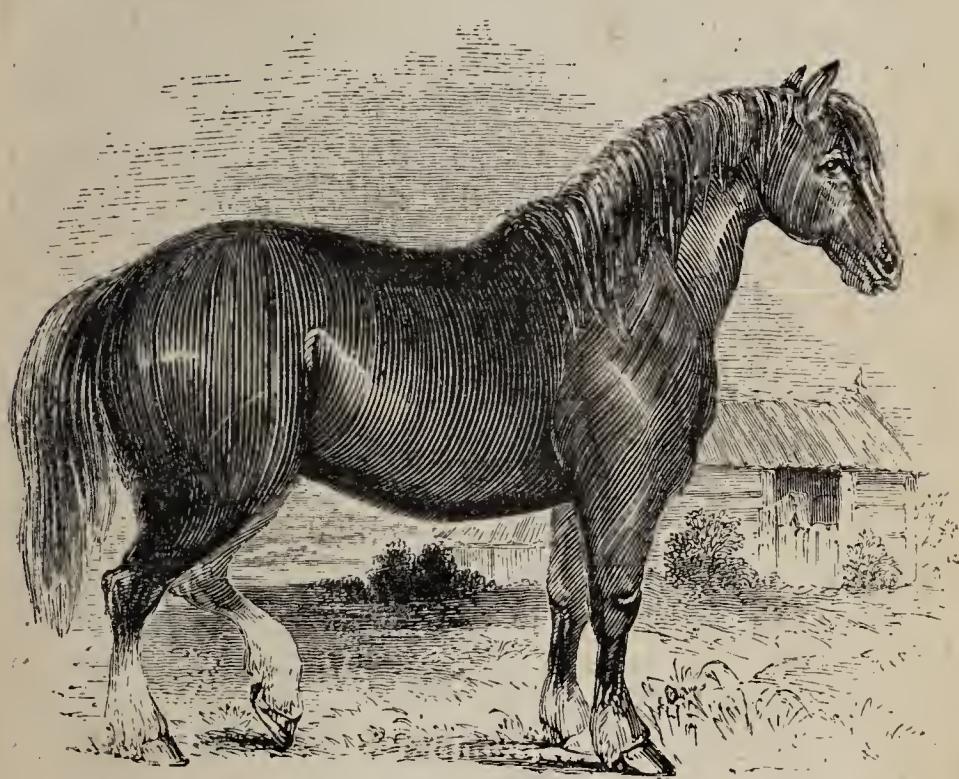
### THE CART-HORSE.

THE Horse, under proper care and control, is a most active and useful servant to man. When well treated, he will shrink from no reasonable share of labour, and will obey the voice and often the mere look of his master. Many of our readers must have observed these qualities in the Cart-Horse, and noticed the ease with which an intelligent driver may direct his loaded waggon or dray through crowded streets and narrow lanes, or back it down a gateway in which there appears to be scarcely room; all this being done without the application of the whip to the willing and sturdy animal.

The welfare of the Horse is, in a great degree, con-

\* Job xxxix. 16—26.

nected with our own ; and it is therefore surprising that it should be so ill used as it sometimes is. Those persons who are cruel to animals, either by beating them angrily, or putting them to work which is too heavy for them, seem to forget that such conduct is reproved in Scripture : “A righteous man regardeth the life of his beast.”\*



It must be remembered, that, as the Horse possesses amazing strength, and has no reason to guide it, we ought not to trust our lives and limbs to its disposal, without a sufficient check on its movements. Its dangerous nature, when uncontrolled, is adverted to by the Psalmist, who draws from it a lesson on violence and stubbornness among men : “Be ye not like to horse and mule, which have no understanding ; whose mouths must be held with bit and bridle, lest they fall upon thee.” †

\* Prov. xii. 10.

† Psalm xxxii. 9.

It is thought that the Horse was first brought under the service of man by the Egyptians. The earliest mention of it is made in the book of Genesis, as belonging to the time of Joseph. When the famishing inhabitants of Egypt had spent their money in the purchase of corn, "they brought their cattle unto Joseph ; and Joseph gave them bread in exchange for horses, and for the flocks," &c.\* Jacob, in his dying address to his sons, says, "Dan shall be a serpent by the way, an adder in the path, that biteth the horse heels, so that his rider shall fall backward."† On the removal of the body of Jacob by his son Joseph from Egypt to Canaan for burial, it is recorded : "There went up with him both chariots and horsemen."‡

## THE ZEBRA.

THESE elegant animals are chiefly found in the southern parts of Africa. Herds of them are sometimes seen grazing on the vast plains which lie north of the Cape of Good Hope. They are, however, so quick-sighted, wild, and fleet, that it is very difficult to take them alive. Attempts have been made to tame the Zebra, so as to make it useful as a beast of draught or burden, like other creatures of the horse tribe. Such attempts have been hitherto vain ; but kind and gentle treatment, if long continued, may perhaps yet effect that which other methods have been unable to accomplish.

There was a female Zebra in the Tower menagerie, in 1814, which would carry her keeper a little distance, but would then become restive, and kick violently. When angry, she plunged, and tried to seize him with her teeth ; and she was always savage towards strangers.

\* Gen. xlvi. 17.

† Gen. xlix. 17.

‡ Gen. 1. 9.

A very fine male Zebra perished in the flames at the Lyceum in the Strand, some years ago, when that theatre was burnt down. He was more docile than most of his species, and once allowed himself to be ridden quietly from the Strand to Pimlico. He had been born and reared in Portugal, his parents having been partly tamed.

In the pasture-ground of the Zoological Society's Gardens, may be seen some fine Zebras, including a



species first distinguished by Mr. Burchell during his travels in South Africa, and called the Zebra of the Plains.

Mr. E. T. Bennett describes one of this species, which was kept in the Tower in 1826, as beautifully marked. "The ground colour of its whole body is white, interrupted by a regular series of broad black stripes, extending from the back across the sides, with narrower and fainter ones intervening between each.

This specimen, which has now been about two years in the Menagerie, will suffer a boy to ride her about the yard, and is frequently allowed to run loose through the Tower, with a man by her side, whom she does not attempt to quit, except to run to the Canteen, where she is occasionally indulged with a glass of ale, of which she is particularly fond."

Mr. Rarey tried to tame the Zebra ; but his method, which was always successful with the horse, proved of no avail.

---

### THE ASS.

THE Ass is a patient, gentle animal, which does a great deal of useful work, and injures nobody. It is content with the coarsest grass or hay, or thistles by the roadside, and labours well, though kept to a small allowance of food. It treads very carefully, and may safely be trusted in descending high hills.

It is often treated very ill by cruel and cowardly persons ; indeed, cruelty and cowardice are often found to go together. The nature of the Ass is not so lively as that of the horse ; but allowance ought to be made for this ; and if a creature be stubborn, unkindness and violence will make it more obstinate still. If we consult the pages of the Old Testament, we shall observe that the Mosaic law strictly enjoined care and kindness towards this and other beasts of labour, "that thine ox and thine ass may rest,"\* &c.

The Wild Ass of the East, mentioned by Job,† by the Psalmist,‡ and by the prophet Jeremiah,§ is a very fine, swift-footed, and bold creature. Bishop Heber, in his "Journey through the Upper Provinces of India,"

\* Exod. xxiii. 12.  
† Psalm civ. 11.

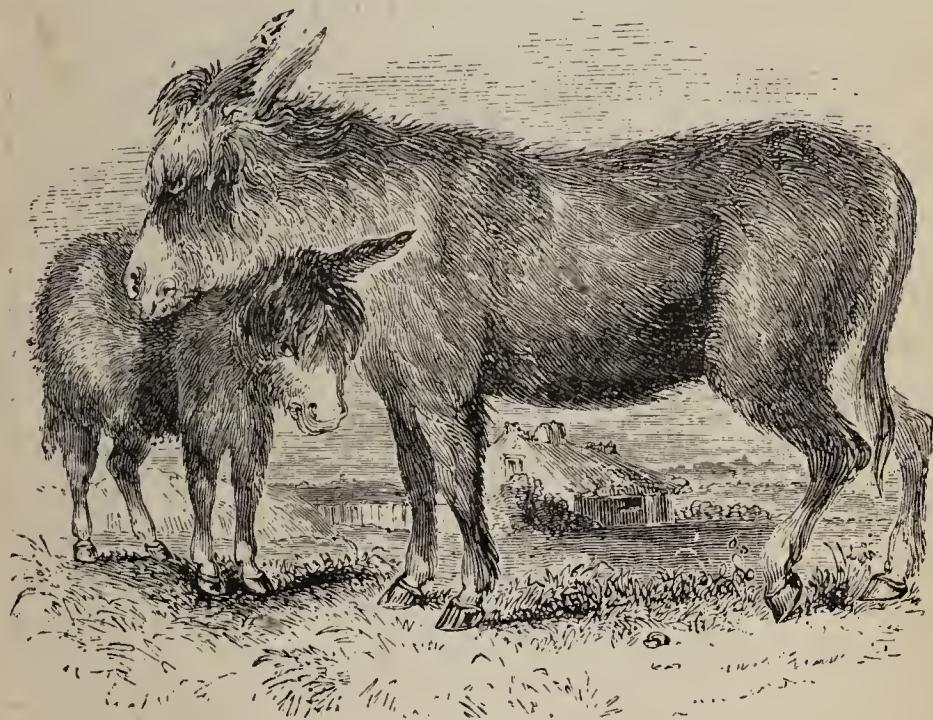
† Job xxxix. 5—8.  
§ Jer. ii. 24 ; xiv. 6.

describes “a noble Wild Ass from Cutch,” which he saw in a paddock near Bombay.

The Ass of our own country is useful in many ways. The milk is sometimes considered beneficial for weak stomachs, and in cases of consumption. The skin is made into leaves for pocket-books, and the tougher part of it into shagreen, for spectacle-cases, &c.

The Rev. W. Bingley, in his “Animal Biography,” gives the following anecdote.

“An old man who for many years sold vegetables in



London employed an Ass to convey his baskets from door to door. He was very kind in feeding it frequently, and gave the poor industrious creature handfuls of hay, or pieces of bread or greens, by way of refreshment or reward. The old man had no need of a stick to beat it; and seldom did he even lift his hand against it, to drive it on. This kind treatment was noticed, and he was asked whether his beast was not apt to be stubborn, ‘Ah! Master,’ he replied ‘IT IS OF NO USE TO BE CRUEL:

and as for stubbornness, I can't complain, for he is ready to do anything, or go anywhere. I bred him myself. He is sometimes playful and skittish : and once ran away from me ; and while more than fifty people were after him, laughing and trying to stop him, he suddenly turned back of himself, and never stopped till he ran his head kindly into my bosom."

---

### THE ARABIAN CAMEL, OR DROMEDARY.

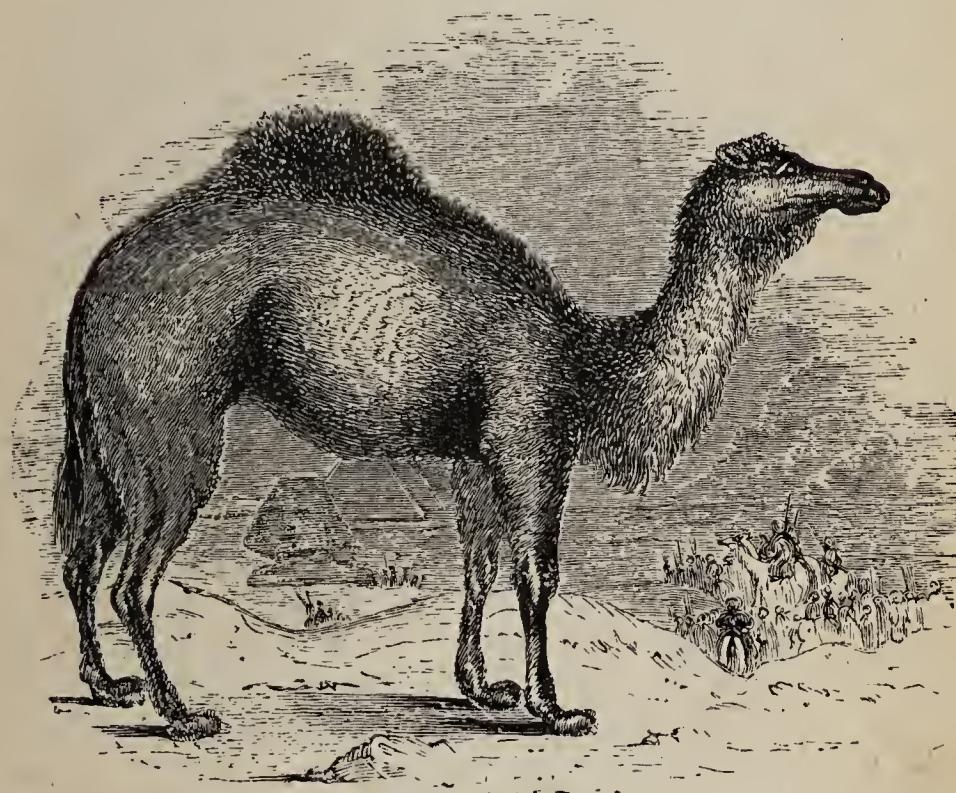
THE Camel is one of the most useful creatures with which we are acquainted. God, in His wisdom, has given it qualities suitable to the countries in which it is found, and to the purposes for which its help is required by man. The Arabs call it "the ship of the desert;" for it enables them to pass safely over the vast and pathless wastes of Arabia and Northern Africa. These travellers are often many days in the desert without finding a spring of water. If, then, the patient Camel had not some unseen means of support, it would perish under its heavy load. The average pace of a heavily-laden Camel is about two and a half miles an hour. The distance from Aleppo to Bussora, across the Great Desert (about 720 British miles), was traversed by Mr. Carmichael in 322 travelling hours, and by Mr. Hunter in  $299\frac{1}{2}$ .

The Camel has four stomachs : in one of these the animal can store up a quantity of water before it sets off on its journey ; and when this water is wanted, it can make use of it to refresh itself and moisten its food. It bears hunger surprisingly well, and is satisfied with a few dates or beans when its regular meal cannot be had. Its broad and tough feet are suited to the soft sand, as they may be spread out when necessary. When the hot sands are blown up by the wind, the

Camel can close its nostrils, and is thus spared a great deal of pain and injury.

The Arabian Camel, or Dromedary, has a single hump : this animal has been employed from the earliest times as a beast of burden. The Bactrian Camel has two humps.

The Dromedary measures from five to seven feet high.



It is gentle and teachable when kindly treated ; but is impatient under rough usage, and unwilling to be tasked beyond its strength. What a hard-hearted person must he be who would treat with cruelty any dumb animal, especially one whose services have been so long and so willingly given to man ; and how greatly should we consult our own interest, as well as duty, by refraining from exacting an unfair measure of labour from beasts of burden ! The Arabian proverb says, “ It is the last hair that breaks the Camel’s back.”

This kind of Camel is frequently alluded to both in the Old and New Testament. We read in the twelfth chapter of Genesis, that Abraham had Camels. Part of the substance of Job was 3,000 Camels;\* "The bunches of Camels" are noticed by Isaiah;† John the Baptist had his raiment of Camel's hair.‡

---

### THE LLAMA.

THE Llama is generally about four feet and a half high, and nearly six feet in length. Its usual weight is about 300 pounds. It is a native of the Cordilleras of the Andes, and is still more frequently found in Peru and Chili.

Llamas live together in herds of one hundred or two hundred each, and feed on a peculiar kind of grass or reed that covers the mountains on the sides of which they dwell. While they can procure green herbage, they are never known to drink. They appear to possess a capability, similar to that of the camel, of resisting thirst, and of providing against its effects.

Mr. Bennett, in his description of a specimen which was recently kept in the Zoological Society's Gardens, advertises to other points of likeness between the Llama and the Camel, and calls attention not only to the peculiar structure of the stomach, but to the plan on which the feet of both these animals are formed.

Llamas are mild and tractable, and are used in many parts of South America to carry burdens. They were formerly employed in the ploughing of land. Like the camel, they lie down to be loaded; and when they are wearied with much labour, no blows will induce them to proceed. Although very gentle if well used, the Llama readily takes offence at any insult, and then it has a bad habit of spitting at the person with whom

\* Job i. 3.

† Isaiah xxx. 6.

‡ Matt. iii. 4.

it is angry. This seems to be the only method it has of showing its resentment ; and when overloaded or fatigued, or ill-treated by its driver, the poor creature falls down and pours out against him a quantity of this fluid, of which the Indians in general are much afraid, as they assert that it is of a poisonous nature, either burning the skin, or causing dangerous eruptions.



The Llama is slow and careful in moving when it is under control, or when loaded with baggage ; but among its own native hills or valleys it has a swifter pace than an excellent horse. When it observes any one approaching, it utters a kind of neigh, and the herd, taking the alarm, run off with great speed. They outrun all the dogs, so that the natives have scarcely any mode of killing them, but with guns.

## THE ELK.



THE Elk, or Moose Deer, is a native of Canada and Nova Scotia. It is also found in Lapland, Norway, Sweden, Russia, Siberia, and part of Tartary. It is unable to exist in temperate regions, and thrives in a cold climate. The fossil remains of a very large kind of Elk have been found in England and Ireland ; but the largest of this species in a fossil state met with, was found in the Isle of Man.

The Elk often grows to the size of a large horse. It is more awkwardly formed than the rest of the Deer kind ; the head being large, the neck short, the shoulders high, and the front legs long. The weight of the horns is enormous. This animal feeds on the moss and plants which it finds on the sides of rocks, and eats the twigs, buds, and small branches of trees. In consequence of

the shortness of its neck, and the length of its legs, it cannot browse on the herbage at its feet. Sir Charles Bell, in his "Treatise on the Hand," after dwelling on the wonderful provision of the proboscis, or trunk of the elephant, for enabling that animal to take its food, says of the Elk :—

"A remarkable proof how unable this animal is to feed in the common way, was afforded by an accident which befel a fine specimen in the Zoological Gardens. His food having been unintentionally scattered on the ground, he was obliged, in order to reach it, to extend his fore-legs laterally: in this position his foot slipped, he dislocated his shoulder, and died of the accident."

The Elk is generally inoffensive : but it is hunted in winter in Canada, and, when wounded, becomes fierce and dangerous. It is said, that, on being first discovered by the huntsmen, it falls down, for a few moments, as if, through fear, it had lost the power of motion. Some persons have thought that, on such occasions, it was seized with epilepsy ; and, on this account, the hoof was formerly used for epileptic fits ! This notion, however, no longer prevails.

The flesh of the Elk is considered light and nourishing food. Mr. Gosse, in his "Canadian Naturalist," says it is like beef in appearance, but more juicy and tender. He adds :—"These animals are frequently taken in the Indian-stream territory, a kind of neutral ground on the boundary of this province and New Hampshire, claimed by both governments. Paths are worn by their feet, leading to the brook whither they resort to drink ; and they are caught by traps laid in these paths. I am told that they are almost always dead when found ; as they soon kick and worry themselves to death."

The skin of the Elk is strong, and makes excellent leather.

## THE REIN-DEER.



THIS animal is of great use to the inhabitants of Lapland, which is a country covered with snow for about three-quarters of the year. Its flesh supplies the people with good food : they make cheese of its milk, warm clothing of its skin, bow-strings and threads of its sinews. Its antlers, or horns, are made into glue, and its bones into spoons and other articles.

But this is not all ; the Laplanders travel from place to place in sledges with the help of the Rein-Deer. A couple of these swift creatures yoked together will carry their master 112 English miles in a day. In the language of Lapland, "they will change his horizon three times in the twenty-four hours ;" that is, they are

able to traverse three times the length they can see at starting. The sledge is formed like a boat: the traveller is tied into it, and is conveyed rapidly along by night as well as by day, being directed in his course by observing the stars, and the quarter from which the wind blows. Accidents are of rare occurrence.

The food of the Rein-Deer, consisting of mosses, and the buds of evergreens, and other arctic plants, is generally obtained with little trouble.

God is very kind in giving food to the Rein-Deer, when, owing to the deep and hard snow, there seems to be nothing for them to eat. He has furnished them with strong horns, with which they dig through the snow, and there find *lichen*, or moss, for food. If this food should be so deep under the snow that they cannot reach it, they are not left to starve, as they can generally get some of the moss which grows on the Lapland pine-trees.

The provision made by the Almighty for the sustenance of animals is often noticed in Scripture:—

“The eyes of all wait upon Thee; and Thou givest them their meat in due season. Thou openest Thine hand, and satisfiest the desire of every living thing.”\*  
“He giveth to the beast his food, and to the young ravens which cry.”†

### THE RED DEER.

THERE are three species of Deer, natives of this country;—the Stag, or Red Deer, pictured on the next page; the Fallow Deer; and the Roe Deer; each a beautiful creature of its kind. The first is fond of woods and forests; the second, of wide plains; the third, of hills and mountains. The Stag is the largest of the present British species.

\* Psalm cxlv. 15, 16.

† Psalm cxlvii. 9.

In England these animals are now seldom met with in a wild state; but in many parts of Scotland they still exist in considerable numbers; and a Stag-hunt is, even in the present day, the occasion of much excitement and profuse hospitality. Formerly, the gathering of the



clans for this object was often made subservient to political purposes, or the indulgence of private animosity. The old song of Chevy Chase describes a sanguinary battle, and dreadful scene of death, occasioned by the mutual feuds which reigned in the families of an English and a Scottish nobleman, Percy and Douglas.

" To drive the deer with hound and horn  
Earl Percy took his way ;  
The child may rue that is unborn  
The hunting of that day ! "

From very early periods of the history of England, the Stag has been the favourite object of the chase ; and the most oppressive laws were passed, in former days, to preserve this animal for a cruel kind of sport. In the feudal times there was a severer punishment for destroying or taking a Deer than for killing a man !

A few Deer are still to be found in the New Forest, and in other parts of the kingdom. White, in his "Natural History of Selborne," informs us that these Deer were plentiful in Woolmer Forest, Hampshire, in the reign of Queen Anne, who was treated with a sight of the whole herd, amounting to about five hundred head, brought by the keepers along the vale, before her majesty. The royal Stags of England are chiefly kept in a small park at Windsor, for the purpose of being hunted by the Queen's Stag-hounds.

On the 4th of December, 1843, a fine Scotch Deer, belonging to the Royal collection, was uncared at Maidenhead, and after a run of two hours and three quarters, over upwards of thirty miles of country, a portion of which was on the line of the Great Western Railway, was taken in the tap-room of a public house at Reading, whither the poor fugitive had fled for refuge.

---

### THE ROEBUCK.

THE Roebuck, which is the smallest of the Deer kind, was formerly an inhabitant of Wales, and of the northern parts of England ; but it is now very rare in these places, and is chiefly found in Scotland. It is fond of mountainous districts, while the Fallow-Deer delights in wooded plains, and the Stag in extensive

forests. It differs also from them in its domestic habits, being kind and constant to its mate, as its chosen companion for life: "so that," as Professor Bell observes, "the Turtle-Dove has no longer the exclusive claim to be considered as the honoured emblem of the virtue of conjugal constancy."

These animals are not often met with in large numbers, but are seen two or three together; they are ex-



tremely cautious, and make use of their fine sense of smelling, as well as hearing, to warn them of an enemy. They are very quick in discovering the approach of man; one way by which their pursuer deceives them, is to hold some lighted peat in the hand, as the animals are accustomed to the smell, and are less upon their guard in proceeding towards the spot to which it leads them.

Their cry has a sound between that of the bleating of a sheep and a bark ; at night this cry may be heard at a great distance. They are very active, and bound without much seeming effort across a space of nearly twenty feet. When closely hunted, or suddenly startled, their speed is wonderfully great, and the action of their body and limbs beautiful. They feed on the buds and small shoots of forest trees, and thus do no small injury in the woods.

The usual method of killing them is to send hounds into the woods, and men to beat the covers, the tracks or passes being guarded by the shooters. Another mode sometimes adopted is to walk quietly through their haunts in the early dawn, and, if possible, to get within shot of them, which, however, is no easy matter.

A fine specimen of a Persian Roebuck was presented to the Zoological Society by Sir T. D. Acland, Bart.

---

## THE GIRAFFE.

THIS is a graceful, mild, and gentle creature. The Romans gave it the name of *Camelopardalis*, from its similarity to the Camel in form, and to the Leopard in spots. Pliny, and other ancient writers, briefly noticed it ; but Heliodorus\* thus described it in his *Æthiopica* :—“The ambassador of the people of Abyssinia brought presents to Hydaspes. Among other things was an animal of a strange and wonderful kind, about the size of a camel, marked with florid spots : the hinder parts were low, like those of a lion ; the shoulders, front feet, and breast, disproportionately elevated ; the neck was small and lengthened out from the body, like a swan ; the head in form resembled a camel’s, but

\* A native of Emessa in Phœnicia, and bishop of Tricca in Thessaly, who lived near the end of the fourth century.

was twice as large as a Lybian ostrich's ; and it rolled its eyes, which had a film over them, in a strange manner."

When standing with its head and neck erect, the Giraffe measures sixteen or eighteen feet in height ; and



this is its usual position, except when grazing. It feeds delicately, and chiefly on the leaves of trees, which it can easily reach ; but in browsing from the ground, it is obliged to stretch apart its front legs. In preparing to lie down, it kneels like a camel. When pursued, it trots so fast, that even a good horse is scarcely able to

overtake it ; and it has an advantage in being able to keep on its course for a long time without taking rest.

It is found on the plains of Africa, and is sometimes attacked by lions and other beasts of prey ; and, though it might at first sight appear defenceless, we are told that “by its kicks it frequently wearies, discourages, and distances even the lion.” The use of the little tufted horns with which its head is adorned is not known. The flesh of the young Giraffe is said to be good. The Hottentots hunt the Giraffe for food. But Dr. Livingstone often found Giraffes and other wild animals so mangy as to be uneatable even by the natives.

Some interesting specimens of this rare and beautiful animal are preserved in the gardens of the Zoological Society. The four original ones were procured with great difficulty in Nubia, in 1836, by M. Thibaut, who says, “In its disposition the Giraffe is very gentle. It is extremely fond of society. I have seen one of them shed tears when it no longer saw its companion, or the persons who were in the habit of attending it.”

---

## THE DORCAS GAZELLE.

THIS is one of the *Hollow-Horned Ruminants*. Ruminants (derived from *Rumen*, the Latin for cud) are quadrupeds which chew the cud. They all have cloven hoofs. There are various kinds of Antelopes. One beautiful species, called the Ariel Gazelle, inhabits Arabia and Syria. Herds of them are sometimes hunted by the people, who alarm them, and force them to leap over walls, on the other side of which are deep ditches. In these ditches they are thus entrapped. They are then easily taken. Sometimes they are hunted by greyhounds, whose speed is not sufficient to overtake them. Then the poor animal is

attacked by a falcon, which is trained to strike at the head and eyes, so as to perplex its sight, and check its course. It then becomes a prey to the dogs. The flesh is sold to the Arabs. Of the skin a kind of parchment is made, which is used to cover the small drum with which the Syrians accompany their musical instruments, or the voice. When taken young, however wild and timid it is by nature, the Gazelle is easily tamed, and



becomes familiar and at ease. Its beauty and playfulness render it a great favourite.

The Dorcas Gazelle differs chiefly from the Ariel, in its lighter tint of colour. It is a native of Northern Africa. When a troop of these Gazelles is pursued, they fly to some distance, then stop, turn round, gaze attentively at the hunter, and again take to flight. If hard pressed, they disperse in various directions, but soon re-unite. When surrounded and brought to bay,

they defend themselves with spirit and determination, joining in a close circle, with the females and fawns in the centre, and presenting their horns at all points to the foe. This elegant creature is often the prey of the lion, the tiger, the panther, and other wild beasts.

## THE NYLGHAU.



THE Nylghau is a fine species of antelope, and is a native of India.

The male Nylghau is larger and more robust than the stag. The female is much smaller than the male, and is of a lighter and more slender form. She has no horns, nor any hump on the shoulders. The colour of the male is a slate-blue tint ; that of the female is a

pale reddish brown, marked with spots and patches of white.

There is one of these creatures now in the gardens of the Zoological Society, London. It is gentle and familiar, licking the hands of those who offer it bread, and suffering itself to be fondled without showing any fear. There are, however, times at which its temper is violent. When angry, and intending to attack, it falls suddenly on its knees, shuffles onward to within a few paces of the object of its resentment, and then, darting forward, butts with its head in a most resolute manner. Like most other creatures, it is best managed by kind treatment. The name of this animal, *Nylghau*, is a Persian word, signifying "Blue Ox."

During the last century a pair of Nylghaus were kept in a paddock in Blenheim Park: but as they frequently showed symptoms of ferocity, and were thence considered dangerous, they were destroyed.

---

### THE GNU.

THIS remarkable animal is generally classed among the antelope kind; but a naturalist, who has had good opportunities of observing it at the Cape of Good Hope, considered the Gnu a graceful link between the buffalo and the antelope. It inhabits the plains of Central and Southern Africa, and is found in company with the zebra, the quagga, and the ostrich. Different travellers describe it as resembling in form the horse, the ox, and the stag. It is about four or five feet in height, and between five and six feet in length. Its legs are slender, in proportion to its heavy-looking body, and it seems scarcely capable of the astonishing speed with which it moves.

Mr. Pringle says of the Gnu: "Among other pecu-

liarities, I observed that, like the buffalo or the ox, he is strangely affected by the sight of scarlet ; and it was one of our amusements, when approaching these animals, to hoist a red handkerchief on a pole, and to observe them caper about, lashing their flanks with their long tails, and tearing up the ground with their hoofs, as if they were violently excited, and ready to rush down



upon us ; and then, all at once, when we were about to fire upon them, to see them bound away, and again go prancing round us at a safer distance. On one occasion, a young one, apparently only a week or two old, whose mother had been shot, followed the huntsman home ; and I attempted to rear it on cow's milk. In a few days

it appeared quite as tame as a common calf, and seemed to be thriving ; but afterwards, from some unknown cause, it sickened and died. I heard of instances, in that part of the colony, where the Gnu, thus caught young, had been reared with the domestic cattle, and had become so tame as to go regularly out to pasture with the herds, without exhibiting any inclination to resume its natural freedom.”

---

### THE CHAMOIS.

THIS is one of the genus *Antilope*. The derivation of *Antilope* is not known, but it has been prettily imagined to be *Anthos*, a flower, and *Ops*, the eye, from the great sweetness and brilliancy of eye for which this race is distinguished. The species of Antelopes are very numerous and varied. The Chamois, the subject of the present notice, is a very interesting example of the genus. He appears to be stopped in his course for a moment, by the sight of a precipice which yawns before him, but which he seems ready to clear. He is found in the mountainous parts of Europe and Western Asia, in the Alps, the Pyrenees, the Carpathian and Grecian mountains, and the heights of Caucasus and Taurus. The Antelope inhabits the loftiest ridges, and displays the most astonishing activity. The senses of sight, hearing, and smell in the Chamois are extremely acute ; and it is aware of the approach of the hunter at a great distance off. When its fears are excited, it bounds from rock to rock, as if to gain a view of the surrounding country, and then, on perceiving the enemy, it hisses loudly, and rushes off, scaling the snow-covered rocks, and leaping from crag to crag, and alighting for a moment on a small and narrow footing which is scarcely to be distinguished by the eye of man, and which overhangs some deep abyss. The danger attending the chase

of such an animal may be easily imagined. Indeed, the life of the Chamois-hunter is one of imminent and continual peril. But he is urged on by the excitement of his pursuit; and danger itself has charms in his sight. Thrilling tales are told of the adventures and hair-breadth escapes of such bold hunters, especially of two on the Finsteraarhorn, in Switzerland, on Oct. 14, 1822. Pursuing their prey, they had slipped down



to a narrow shelf of the mountain, overhanging a fearful precipice. Behind them was a perpendicular rock which it seemed impossible to climb. At last one of them bent down with part of his leg over the precipice, so that the other might step on his shoulder, and thus gain a small projection of the rock. This he did, and on arriving at the top, he managed to let down a rope for his friend.

The food of the Chamois consists of mountain herbs

and flowers, and the tender shoots of shrubs. It is also fond of the salt which it finds in the rocks of the Alps. Its skin is much esteemed as leather for gloves and other articles. Its horns, which are very elegant, are sold or hung up as trophies in the houses of the hunters. The age of each animal is known by the rings on its horns, a ring being added each year.

## THE IBEX.



THE Ibex, Bouquetin, or Steinbok, is a bold and active animal, inhabiting the Alps, the Apennines, the Pyrenees, and the mountains of the Tyrol. It is also found in some of the mountainous districts of Asia. It has large knotty horns, curving backwards over the

body. These are sometimes three feet long in the male. The horns of the female are smaller. The Ibex has a small head, full eyes, and rough hair; the hair being in the summer short and close, in the winter long and thick. The colour is a light greyish brown; and the male has a dusky beard. It stands about two feet six inches high.

The chase of this animal is attended with difficulty and danger. It lives in bands of five to ten in number—one standing sentinel while the others feed; the sentinel's signal of alarm is a short whistling sound. Like the chamois, it will lead the huntsman to steep and rugged spots on the mountains, and, when hard pressed, will endeavour to drive him over the rocks. Wary in its habits, it comes down in the night for its simple food in the field or wood, and returns at sunrise to its bleak snow-covered heights. It is able to abstain from food or water for a considerable time. The young are produced in April, and a few hours after their birth are strong enough to follow the mother.

The wild goats alluded to in certain passages of Scripture are supposed to have been of this species. The word Ibex is used in the Latin Vulgate translation for the animal mentioned in 1 Sam. xxiv. 2, and Job xxxix. 1.

This is one of the beasts that might be eaten by the children of Israel. The chamois is spoken of in the same verse.\*

---

## THE COMMON GOAT.

THE Goat is a strong, active, hardy animal. In Wales it is found very wild, and roaming over the most rugged parts of the mountains and rocks, in search of food, or in sport. It keeps its footing on the smallest

\* Deut. xiv. 5.

point on which its feet can possibly rest, and takes leaps from one ledge to another with confidence, as if certain of alighting safely, however dangerous the attempt may appear. It is always aware of the approach of bad weather, and will betake itself to a place



of shelter before a storm. The poet Gray, in describing some of the hilly and mountainous scenery in Craven, in the West Riding of Yorkshire, says—

“ On the cliffs, above 300 feet high, hung a few Goats : one of them scratched an ear with its hind foot in a place where *I* would not have stood stock-still

‘ For all beneath the moon.’ ”

The Goat finds food where other creatures cannot venture, among the heights, not only of our own country, but of the Alps and Pyrenees. It eats with relish certain plants which to most animals would be hurtful, such as hemlock, henbane, and foxglove. It

is easily tamed, and becomes fond of man, showing much pleasure in his society, and being kind and playful to those who caress it. Many persons keep Goats in stables, with an idea that they are good for the health of horses. It is likely that they promote the good temper of their companions. Good temper and cheerfulness tend to health; and it is a fact that a horse often shows great attachment to a Goat.

The hair of the Goat is very useful in making shawls, and other articles of dress; its skin is made into Turkey or Morocco leather; and the skin of the kid, or young Goat, becomes, when dressed, soft and beautiful leather for gloves.

Frequent reference is made in Scripture to the Goat. Jacob, by the direction of Rebecca, fetched "two good kids of the Goats,"\* to dress for his father Isaac. "The high hills are a refuge for the wild Goats."† In the Book of Proverbs we find an allusion to their milk ‡ Under the Mosaic law the Goat was selected and offered in sacrifice, as a "sin-offering for the people."§

### THE SYRIAN GOAT.

THE general appearance and habits of the Goat are nearly the same in all countries. It loves to feed on the tops of hills, and prefers the steep and rugged parts of mountains. It finds sufficient nourishment on dry and barren spots. Goats are so active that they leap with ease among precipitous rocks. They render great service to mankind; their flesh being salted for winter provision, and their milk used for the making of cheeses. The flocks in which they congregate are from ten to twenty in number. The Syrian Goat is distinguished by its long pendulous

\* Gen. xxvii. 9.

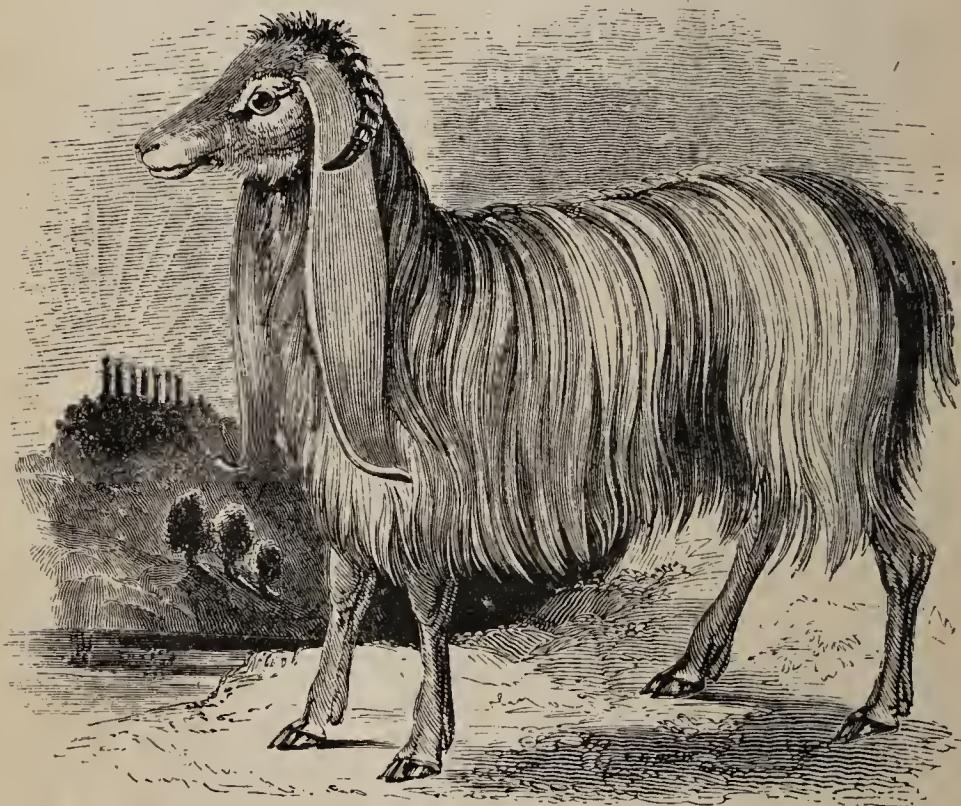
† Psalm civ. 18.

‡ Prov. xxvii. 27.

§ Lev. ix. 15.

ears, which, according to Russell, in his Natural History of Aleppo, are sometimes upwards of a foot in length.

The celebrated traveller, the Rev. Dr. E. D. Clarke, on his road from Jerusalem to Bethlehem, met an Arab with a Goat which he led about the country for exhibition. The man had taught this animal, while he accompanied its movements with a song, to mount upon



little cylindrical blocks of wood, placed successively one above the other, and in shape resembling the dice-boxes belonging to a backgammon-table.

"In this manner," says Dr. Clarke, "the Goat stood first upon the top of one cylinder, then upon the top of two, and afterwards of three, four, five, and six, until it remained balanced upon the top of them all, elevated several feet from the ground, and with all its feet collected upon a single point, without throwing down

the disjointed fabric upon which it stood. The practice is very ancient. It is also noticed by Sandys.\* Nothing can show more strikingly the tenacious footing possessed by this quadruped, upon the jutting points and crags of the rocks ; and the circumstance of its ability to remain thus poised may render its appearance less surprising as it is sometimes seen, in the Alps, and in all mountainous countries, with hardly any place for its feet, upon the sides, and by the brink of the most tremendous precipices. The diameter of the upper cylinder, on which its feet ultimately remained until the Arab had finished his ditty, was only two inches, and the length of each cylinder was six inches.”

---

## THE COMMON SHEEP.

THIS is one of the most useful and interesting animals in our collection. It is perhaps also the most defenceless, and ought to be very kindly treated. We all know the value of its flesh for our food, its wool for our clothing, its fat for giving us the means of light in the dark winter nights, its skin for leather. In Wales and in the highlands of Scotland, its milk supplies butter and cheese.

Sheep bred on the mountains show much boldness

\* George Sandys, a traveller and poet. He began his travels in the East in the year 1610. Speaking of the inhabitants of Cairo, he says, “I have seen them make both dogs and goats to set their four feet on a little turned pillar of wood, about a foot high, and no broader at the end than a palm of a hand, climbing from one to two, set on the top of one another, and so to the third and fourth ; and there turn about as often as their masters would bid them.” We cannot but condemn the cruelty of a practice which he goes on to describe in the following passage :—

“They carry also dancing camels about, taught when young, by setting them on the hot hearth, and playing all the while on an instrument : the poor beast, through the extremity of heat, lifting up his feet one after another. This they practice for certain months together ; so that at length whosoever he heareth the fiddle, he will fall a dancing. Asses they will teach to do such tricks, as if possessed with reason.”—*Sandys's Travels*, fol. 1673, Book ii. p. 98.

and agility in leaping from crag to crag, and venturing in sport, or for food, to small and narrow ledges, from whence it would seem almost impossible for them to make their way back.

They are found in most parts of the world. The flavour of the Welsh Sheep, which run wild about the mountains, is very fine ; but animals of this species



appear to have been brought to the highest state of perfection in England. The Dorset breed is esteemed handsome. For general purposes, the Southdown Sheep is highly valued. This last takes its name from a vast tract of downs formed by a range of chalk hills, extending more than sixty miles in length, through part of the counties of Sussex, Surrey, and Kent.

## THE CAPE BUFFALO.



THIS animal is a native of South Africa, and is well known among the inhabitants of that country for its savage disposition and enormous strength. Happily, as agriculture and population have been extended, it has become less an object of terror than formerly among the natives and settlers of the Cape colony ; but it still finds a shelter in the large forests and jungles of the eastern districts. Skulking in one of these jungles, the Buffalo watches the passing traveller, and suddenly rushes out upon him. In this way, when in a mischievous temper, he will assail a party of men with their horses.

It is stated by the Swedish traveller, Sparrman, and others, that if one of these Buffaloes kills a man by tossing

and goring him with its horns, it will stand over him for a long time, trampling upon him with its hoofs, pressing him with its knees, mangling his body with its horns, and stripping off the skin with its rough and prickly tongue. It appears, however, that the Buffalo is thus ferocious chiefly when in a state of irritation, at certain seasons of the year, or when it has been provoked by hunters.

In Dr. Livingstone's volume of Travels there is a very spirited engraving of a Buffalo Cow rescuing her calf from a lion. "A toss from her," says the Doctor, "often kills him. It is questionable if a single lion ever attacks a full-grown buffalo."

The Hottentots pursue on foot the dangerous and dreadful sport of hunting the Cape Buffalo ; and, from their lightness and activity, they generally succeed in escaping injury and despatching their prey. It is said, that the hide of this Buffalo is so thick and tough that, in some parts, a common musket-ball will not penetrate it. Tin is therefore mixed with lead in preparing the balls designed for this purpose. The strongest and best thongs for harness are made of the hide.

Like the hog, this animal is fond of wallowing in the mire. Its flesh is lean, but juicy, and of a high flavour ; the Hottentots cut it into slices, smoke it, and broil it on the coals.

---

### THE INDIAN OX.

THIS is one of the many varieties of the Ox : the different species resemble each other in having a divided hoof, feeding on vegetable substances, and chewing the cud. The chief particular in which the animal here represented differs from the common Ox, is the hump on the shoulders. The hump is chiefly composed of fat, and has sometimes been known to weigh fifty pounds.

It is reckoned very good food ; indeed it is the most delicate part.

The varieties of these creatures are met with over the whole of Southern Asia, the islands of the Indian Archipelago, and the eastern coast of Africa, from Abyssinia to the Cape of Good Hope. They are of different sizes and colours ; some being as large as a common cow, others not larger than a mastiff dog.



The smaller kind is generally called the Zebu. In all the above-named countries, this animal is valued both as a beast of burden, and an article of food. In some parts of India, it serves instead of a horse, being either saddled and ridden, or harnessed in a carriage, performing in this manner journeys of considerable length—travelling from twenty to thirty miles a day. All the species are treated with great regard and veneration by the Hindoos, who hold it sinful to deprive

them of life. In India a select number of these animals are never allowed even to labour, but have the privilege of straying about the towns and villages, taking their food wherever they please, or receiving it from the hands of the natives. There are small specimens in the Zoological Society's Gardens. One of them shows much impatience and pettishness if any one touches it through the bars of its inclosure.

The Ox is frequently mentioned in Holy Scripture. The wealth of the patriarchs consisted in a great degree in cattle. Abraham and Jacob are recorded to have been rich in cattle.\* Job had five hundred yoke of Oxen, besides camels, sheep, and asses.† The Ox was considered by the law of Moses to be clean, and was much used by the Jews in their sacrifices. It is alluded to by the Prophets : Isaiah contrasts its sagacity and gratitude with the folly and unthankfulness of the people with regard to God : “ The Ox knoweth his owner, and the ass his master’s crib ; but Israel doth not know, My people doth not consider.”‡ When the Son of God became man, and dwelt on earth, one of the first acts of His ministry was to clear the temple at Jerusalem of “ those that sold Oxen, and sheep, and doves.” . . . . “ He drove them all out of the temple, and the sheep, and the Oxen.”§ St. Paul reminds the Corinthians, “ It is written in the law of Moses, Thou shalt not muzzle the Ox that treadeth out || the corn.”¶

### THE AMERICAN BISON.

THE Bison is generally of a larger size than our common Ox, and is so strong, that when running through the woods from his pursuers, he has been seen to level

\* Gen. xii. 16 ; xxiv. 35, and xxx. 43.

† Job i. 3.

‡ Isaiah i. 3.

§ John ii. 14, 15.

¶ Deut. xxv. 4 ; 1 Cor. ix. 9.

|| Heb. *thresheth*.

trees as thick as a man's arm. Bisons are met with throughout the wild and distant parts of North America, where they are the chief food of the natives. The flesh, when in good condition, is juicy and well-flavoured, resembling beef. The tongue is considered a delicacy, and may be cured so as to surpass in flavour the tongue of an English ox. The hump of flesh over the shoulders is much esteemed.

Captains Lewis and Clarke saw vast numbers of Bisons assembled on the banks of the Missouri. "Such



was their multitude, that though the river, including an island over which they passed, was a mile in width, the herd stretched, as thick as they could swim, completely from one side to the other." The same travellers state, that they saw a moving mass of these creatures, to the amount of twenty thousand, darkening the plains.

When attacked, the Bison generally takes to flight ; but when assembled together in numbers, these animals are often less wary, and will then boldly follow their leaders, regardless of danger. It is hazardous for the hunter to show himself after having wounded one ; for

it will continue to follow him, and, though its gait may be heavy and awkward, it will generally overtake the fleetest runner. An old Bison has been known to wait for hours under a tree in which a hunter has taken refuge.

Bisons are destroyed in great numbers by the savage tribes of Indians, who would not know where to find support, if this article of food should fail. One way of killing them is to force a numerous herd to leap together from the brink of a dreadful precipice upon a rocky and broken surface below, where certain death awaits them. The Indians practise this mode by working on the fears of the animals. Selecting some active, swift-footed young man, they disguise him in a Bison's skin, making the deception so complete that the creatures mistake him for one of their own species; and when under the influence of terror occasioned by the loud and sudden yells of the Indians, they hasten whither he leads, namely, to the edge of a cliff, where he secures himself in some well-known crevice, while they leap or tumble in confused masses over the side.

A large fierce-looking Bison was, a few years since, shown in London and other places under the name of the Bonassus.

---

### THE BULL.

THERE are many varieties of this animal, differing from one another not only according to the nature of the climate and district in which they are bred, but also according to the objects for which they are intended by their owners. There are the long-horned, the middle-horned, the short-horned, the Welsh breed, the Devon kind, the Suffolk Duns, the Highland or Kyloe breed, the Lowland, the Alderney, the Chillingham wild cattle, &c. Professor Bell says that the North Devon Ox may

be considered as the very perfection of the working type of this animal. It is characterized by extraordinary docility and good temper, combined with great strength and perseverance in the performance of its labour, and a degree of activity possessed by no other breed.

But, though useful and peaceable when unmolested and carefully treated, the Bull is a formidable creature



when ill used ; and few animals have been more tormented than this.

The excessive fondness of the Spaniards for bull-fighting, is disgraceful to their national character. Such practices are very revolting to the feelings of our countrymen ; and we can have no reason to apprehend any return to those brutalizing sports which once disgraced this land. For in Britain many disgraceful barbarities were formerly practised ; to which the well-known words “Bull-ring” and “Bear-garden” still bear witness.

Bull-baiting was patronized by Royalty; and these dreadful shows were even attended by English ladies. Queen Elizabeth, soon after her accession to the throne, gave a splendid dinner to the French ambassadors, who afterwards were entertained by the baiting of Bulls and Bears. It was repeated on the following day. At a subsequent period, the Danish ambassador was treated at Greenwich with the sight of a Bear and Bull-baiting, "tempered," says Hollinshed, "with other merry disports." Paul Hentzner, a German, who travelled in England in 1598, describing one of these performances, speaks of the Bulls and Bears having been "worried by great English bull-dogs; but not without risk to the dogs, from the horns of the one, and the teeth of the other; and it sometimes happens they are killed on the spot. Fresh ones are immediately supplied in the places of those that are wounded and tired."

The first mention of the Bull in Scripture is in Gen. xxxii. 15, where we read, that among the presents which Jacob took to pacify his brother Esau were ten Bulls. Allusion is also made to this animal in the Psalms, the Prophets, and the Epistle to the Hebrews.\*

### THE COW.

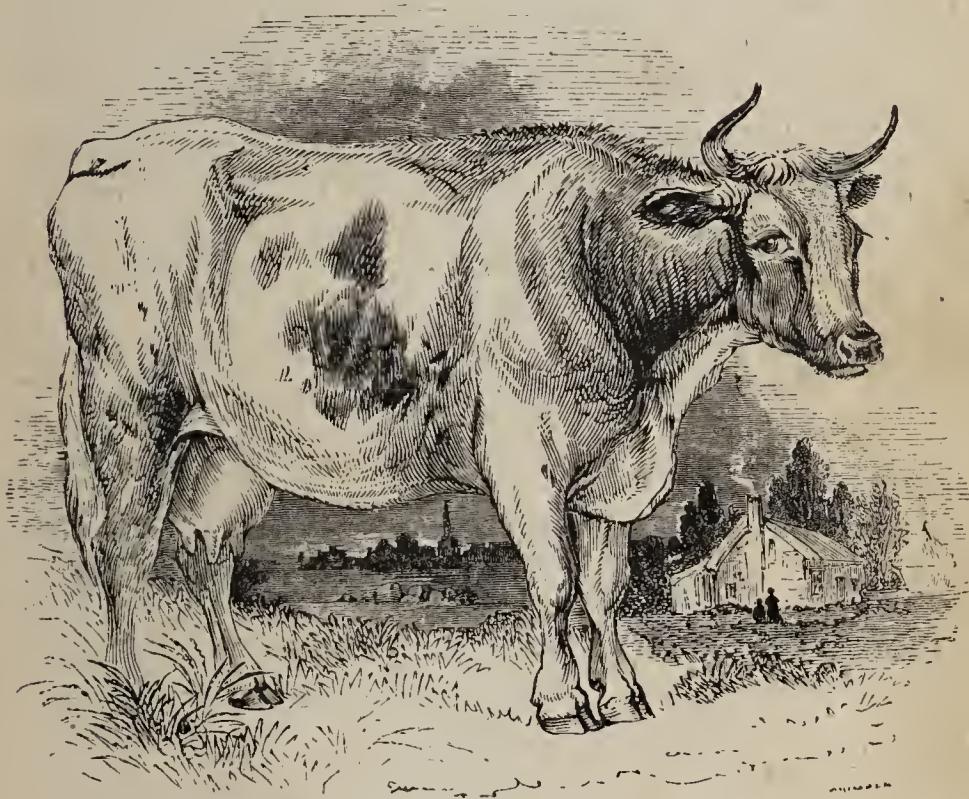
THE Cow is more serviceable even than the sheep. Almost every part of the Cow is of use. Boxes, combs, knife-handles, and drinking-cups, are made of the horns, and glue is made of the hoofs. The bones are sometimes used instead of ivory; and they are also used for manuring the ground. The skin is made into leather for shoes, and for book-binding; the fat into tallow. The hair is a valuable help in making mortar; the blood, in

\* Psalm xxii. 12; l. 13; Isaiah xxxiv. 7; li. 20; Jer. l. 11; iii. 20; Heb. ix. 13; x. 4.

purifying sugar and making Prussian blue; the gall, in cleaning carpets, &c.

How much of our food comes from the Cow! We are indebted to her for milk, cream, and butter. Butter-milk from the Cow is much drank by the Scotch and Irish. The flesh of the ox, we know, is called beef.

It is a proof of great kindness in the Creator, that those creatures which are most useful to man should be



the most plentiful and the most easily reared. This is the case with Oxen: some species or other of them are found in most parts of the world.

The Cow is not wanting in sagacity. Mr. Bell, in his "History of British Quadrupeds," records the instance of a Cow which, after being annoyed for some time in a field by a mischievous boy, who had continued throwing stones at her, at last took him up by his clothes on the tip of her horn, and, putting him out of the field, quietly

deposited him in the road, leaving him much frightened, but not hurt.

Oxen are frequently employed as beasts of draught and burden, as they were in the time of Job and the Israelites. The oxen of Job were ploughing, when the Sabæans seized and took them away.\* Elisha was ploughing with twelve yoke of oxen when Elijah cast his mantle upon him.†

In the Bible we read of clean and unclean animals. Oxen are among the clean. The Cow is mentioned by Isaiah. That prophet, foretelling, by a similitude, the peaceable effects of Christ's religion, says : "The cow and the bear shall feed ; their young ones shall lie down together, and the lion shall eat straw like the ox."‡

---

### THE BEAVER.

THIS is a very useful animal, as it furnishes a valuable kind of fur : and its habits and manners show so much industry and method, that it is well worthy of notice. It is a creature of architectural habits, which are very amusing to the spectator. Beavers take up their abode on the banks of rivers or ponds, and build their own dwellings with pieces of timber, which they have gnawed off the branches of trees, and with clay, which they have dived for, mixing with it such sticks and stones as they can find. This task they perform with their front paws and their mouth, working always by night, until a comfortable house is prepared. In summer they feed either on the bark of trees, or on the green herbage, and the berries which grow in the neighbourhood ; but in winter their food is almost entirely confined to the bark, of which they lay in a large stock before the frost begins. Willow, poplar, and birch, are their favourite trees.

\* Job i. 14, 15.

† 1 Kings xix. 19.

‡ Isaiah xi. 7.

Beavers are very affectionate animals, and seem to feel deeply the loss of a companion. They were formerly taken in large numbers in North America, for the sake of their fur, but their numbers have been so diminished by the reckless destruction of them by the hunters, that comparatively few are now met with in districts where they were formerly abundant.



The Beaver is generally about two feet long, and nearly a foot high. Its body is thick, and it is furnished with a broad flat tail, covered with scales, which serves not only as a rudder, but as a trowel. As soon as the sagacious creature has fixed any part of its building, it turns round and gives it a smart blow with the tail.

Mr. Broderip kept in his house a beaver, which always showed its ruling passion for building, on being let out of its cage. Brushes, baskets, books, boots, sticks, cloths, dried turf, &c., were employed for its

materials. “As the work grew high, *Binny* supported himself on his tail, which propped him up admirably ; and he would often, after laying on one of his building materials, sit up over against his work, appearing to consider it, or as the country people say, to ‘judge it.’ Bread, and bread and milk, and sugar, formed the principal part of *Binny’s* food ; but he was very fond of succulent fruits and roots.”

### THE MOUSE.



A NATURALIST of the present day, speaking of the Mouse, justly styles it “a pretty but annoying little pest.” It is found in almost every place in which man has fixed his dwelling. We have the town Mouse, and the country Mouse. It wanders about our home on land,

and takes its passage with us across the sea to new colonies, there to increase its kind. Yet though so near to man, it always keeps as much as possible out of his sight, as if conscious that it is a thief. Living upon the same diet that nourishes mankind, a few families of mice often make sad havoc, in a single night, of food intended for their betters.

But it is not in our houses that the inroads of the Mouse are chiefly felt. The farmer feels, to his cost, the mischief which it does to his grain. In a barn it creeps among the corn, eating its way at the poor man's expense, and even revels within the rick itself, till the ferret or weasel, trained for the purpose, drives the felon to daylight, when it is quickly despatched. We know, too, that the cat is its active enemy, and that its greediness easily leads it into a mouse-trap..

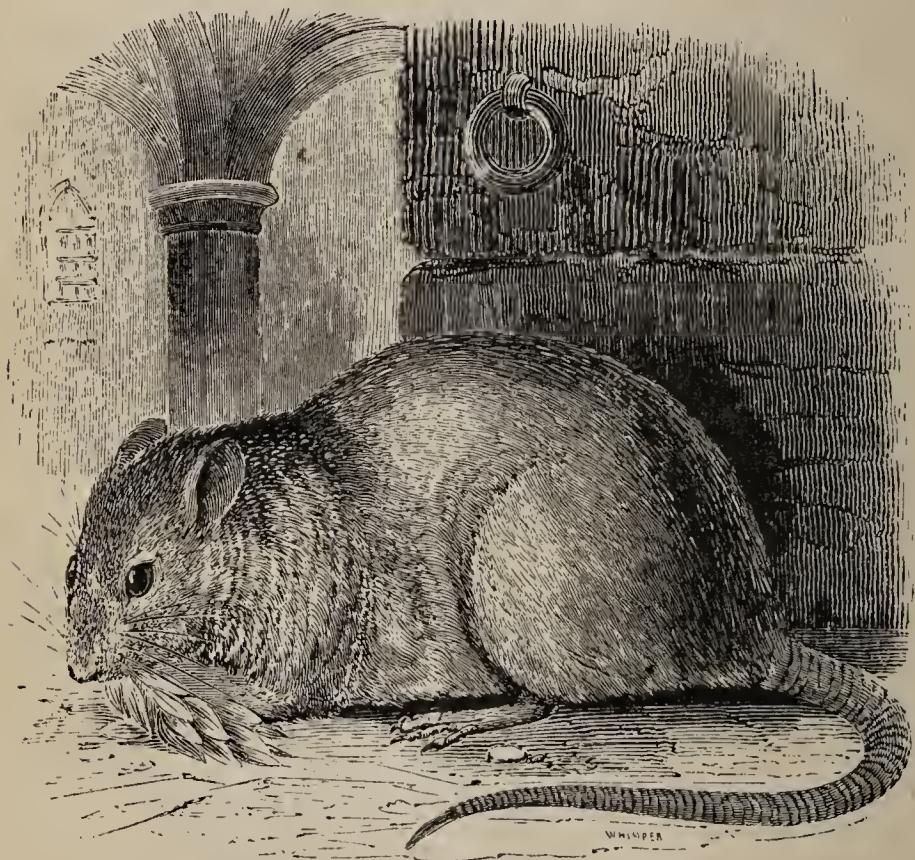
There are several varieties of the common Mouse. One of the most common is the *Albino*, or well-known white Mouse, which runs about the table, and allows itself to be taken by the hand, without showing alarm. This, like the pretty little harvest Mouse, may be kept in confinement for a long time in good health, by allowing it the use of a little tread-wheel, on which it will often exercise itself, apparently to its amusement and satisfaction.

---

### THE COMMON RAT.

THE common brown Rat is now so generally met with wherever man dwells, that its original country cannot be ascertained. It was probably brought hither by means of merchant vessels from some southern or south-eastern country ; Pennant imagines from the East Indies. It is sometimes, by a strange mistake, called the Norway Rat, as if it had been an original native of that country, whereas, when the name was first applied

to it, this creature was not known even to exist in Norway. Its habits are mischievous and offensive, causing serious injury to the property of the farmer, the merchant, the tradesman, and the mariner. We find, to our cost, that it will eat almost anything it can get ; and after eating its fill, will carry off provisions to its retreat. The secrecy of its place of abode, between the walls of houses, and under the flooring of cellars, and its ingenuity in avoiding detection, render



it a difficult enemy to dislodge ; particularly as young ones are produced, from time to time, in large numbers. Mr. Bell says, "It digs with great facility and vigour, making its way beneath the floors of our houses, and often excavating the foundations of a dwelling to a dangerous extent. There are instances of Rats fatally undermining solid masonry, or burrowing through

dams which had for ages served to confine the waters of rivers and canals." Their ravages on the carcases of horses, in the horse slaughter-house at Monfaucon, near Paris, are said to be astonishing. An official report to the French government stated, "that the carcases of horses killed in the course of a day (and these sometimes amounted to thirty-five) are found the next morning picked to the bone."\*

There are some good traits in this animal which are called forth by kindness, and it has frequently been tamed. In a large cage, containing cats, mice, rabbits, guinea-pigs, starlings, an owl, two or three hawks, and several small birds, five brown rats were to be seen nestling for warmth under a handsome brindled cat, which watched and accommodated them as if she were their mother. This interesting collection was called "The Happy Family," and some years ago was to be seen daily on the pavement in front of the National Gallery, London.

The Rev. Mr. Ferryman of Iping, Sussex, saw a number of black Rats (a different species from the above) migrating from one place to another. Among them, or rather in the rear, was "an old blind Rat, which held a piece of stick at one end in its mouth, while another Rat had hold of the other end of it, and thus conducted his blind companion." This anecdote is told by Mr. Jesse, from the information of Mr. Ferryman.

---

### THE CHINCHILLA.

THE fur of the Chinchilla has long been used among us; but the animal itself has been little known until lately, when Captain Beechey presented to the Zoological Society, in London, a living one which he had brought

\* See Jesse's Gleanings in Natural History, Second Series.

from South America. The length of the body of the Chinchilla is about nine inches, and that of the tail nearly five. The fur is long, thick, and woolly, of a greyish colour above, and paler beneath. The form of the head resembles that of the rabbit; the eyes are full, large, and black; and the ears are broad, rounded at the tips, and nearly as long as the head. It usually sits upon its haunches, and is able to raise itself up and stand on its hind feet. When feeding, it grasps its food, like a squirrel, with its front



paws. It feeds on grain of different kinds, and on roots. Its temper is generally mild and affectionate; but if not inclined to play, it bites the hand which would fondle it. It is very cleanly in its habits.

These creatures are natives of Peru and Chili, and live in burrows under ground. They are caught in great numbers by boys with dogs, and are then sold to traders, who take them to Santiago and Valparaiso, from whence they are exported.

## THE JERBOA.



THIS pretty little creature is a native of Egypt, Barbary, Syria, the eastern deserts of Siberia, and some parts of Tartary. It is about eight inches in length, is very active, and in moving generally uses its hind legs only. On the approach of danger it takes high leaps, and by its great swiftness often escapes from its enemies. It is a lively but timid animal, feeds entirely on vegetables, and burrows in the ground like a rabbit. It is fond of warmth, making its bed of the finest and most delicate herbage ; and, wrapping

itself up close in hay at the approach of cold weather, sleeps during the greater part of the winter. The flesh is reckoned a delicacy by the Arabs.

Some writers suppose that this is the "mouse" of Holy Scripture, in which it is spoken of as unclean,\* and forbidden as an article of food. When the lords of the Philistines desired to make a trespass-offering, as an acknowledgment that they had offended the God of Israel by bringing His ark from its proper place, their diviners enjoined the offering of such images as represented the evils from which they were delivered. Among these were "five golden mice,"—"images of your mice that mar the land." † "This," says Bishop Patrick, "was also a custom among the ancient heathens, to consecrate to their gods such monuments of their deliverance as represented the evils from which they were freed."

### THE SQUIRREL.

SQUIRRELS are timid and feeble creatures, and trust for self-protection to flight and concealment. But when they feel safe, they are lively and playful. Spread over almost the whole earth, they inhabit rocks and mountains, plains and woods, feeding on grain and vegetables, and often doing serious injury by preying upon the most valuable productions of the earth. Their numbers are, however, annually reduced in an amazing degree by the ravages of ferocious beasts, birds, and reptiles, which feed upon these small quadrupeds. The general habits and manners of the English Squirrel are admirably portrayed by our own poet Cowper:—

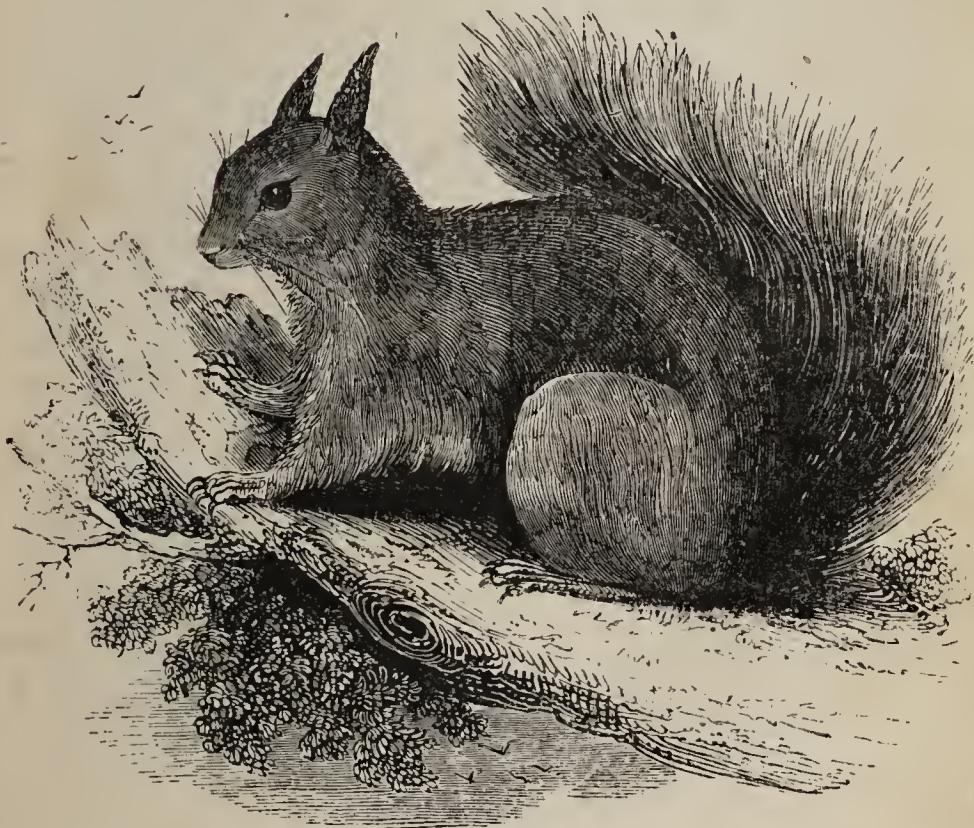
" Drawn from his refuge in some lonely elm,  
That age or injury has hollow'd deep,

\* Lev. xi. 29; see also Isaiah lxvi. 17.

† 1 Sam. vi. 4, 5.

Where, on his bed of wool and matted leaves,  
He has outslept the winter, ventures forth  
To frisk awhile, and bask in the warm sun,  
The Squirrel, flippant, pert, and full of play.

“ He sees me, and at once, swift as a bird,  
Ascends the neighbouring birch ; there whisks his brush,  
And perks his ears, and stamps, and cries aloud,  
With all the prettiness of feign’d alarm,  
And anger insignificantly fierce.”—*The Task*.



The Squirrel is a very pretty, active, and amusing little creature. Its movements in its own native woods are rapid and lively. Dwelling chiefly on trees, it leaps from bough to bough with astonishing swiftness. When kept in a house it is gentle and playful. It lives upon nuts, acorns, beechmast, the bark of young trees, leaf-buds, and tender shoots. In eating nuts, it gnaws quickly through the hard shell, and then delicately nibbles away the kernel, rejecting the dry brown skin, and usually leaving a small portion of the kernel itself. When at its meals it generally sits upon its haunches,

holding its food in its front paws, which serve for hands. It teaches man wisdom in laying up sufficient food for "a rainy day," and for winter consumption. This it stores away in holes or in the forks of trees in the neighbourhood of its own retreat. Its nest, called a dray, is skilfully formed of moss, leaves, and fibres, curiously woven together; and the female is very careful of her young ones.

One of George Wither's *emblems*, illustrative of patience and perseverance, represents a squirrel at its meal, the rain, meanwhile, pouring down heavily on the little animal. Beneath the print are the following lines:—

"The little Squirrel hath no other food  
Than that which nature's thrifty hand provides,  
And in purveying up and down the wood,  
She many cold wet storms for that abides.

"She lies not heartless in her mossy dray,  
Nor feareth to adventure through the rain,  
But skippeth out and bears it as she may,  
Until the season waxeth calm again."

In northern regions the Squirrel becomes of a grey colour, and even in this country the fur is of a paler hue at the colder seasons of the year. Its head and body generally measure between eight and nine inches, and its tail upwards of six inches.

---

## THE ROCKY-MOUNTAIN FLYING SQUIRREL.

THE Flying Squirrels agree in their general characters with the rest of this amusing family; but they are distinguished from the common race by the possession of a fold of skin, which proceeds from each wrist, and which, when it is expanded like a sail, enables the creature to take long sweeping leaps from branch to branch, or from tree to tree, or to alight suddenly on the ground

from a great height, with such a rapidity that the eye can scarcely follow the motion. There are many Flying Squirrels belonging to different countries, but much resembling each other in form and character. They are all lively and playful in their habits, and pass much of their time in frolic gambols amid the branches of the trees in which they dwell. The species



depicted in the engraving is one of the American Flying Squirrels, and was discovered on the Rocky Mountains. There dwell these lively little animals in thick pine forests, seldom venturing from their retreat except in the night.

## THE CRESTED PORCUPINE



THIS animal is not covered with hair, but chiefly with hollow tubes like the quills of feathers. These quills are from ten to fourteen inches long, sharp pointed, and thickest in the middle. They seem to be given to the wearer for its own defence. They lie nearly flat upon the body, and incline backward ; but when irritated or alarmed, the creature can raise them suddenly, by certain muscles, in such a manner as to secure itself from the strongest and most violent foes. The quills on the tail make a loud rustling noise whenever the animal shakes them. It never begins a quarrel ; but when it is put upon its guard, not even the lion ventures to attack it.

It is a native of many parts of Asia, and of Africa generally ; it is also found wild in Italy and Sicily ; and there are other species known. The Indians hunt it for its quills and flesh. It sleeps almost all the day in its lonely burrow, which it quits only in the evening

in search of food. This consists chiefly of roots, buds, and fruits. When tamed, it is a dull but peaceable animal, showing scarcely any signs of intelligence, and but little disposition to become familiar.

Bingley, in his "Animal Biography," says that the late Sir Ashton Lever had a porcupine which he frequently turned out on the grass behind his house to play with a tame hunting leopard, and a large Newfoundland dog. As soon as they were let loose, the leopard and dog began to pursue the Porcupine, which always at first endeavoured to escape by flight, but, on finding this ineffectual, he would thrust his head into a corner, making a snorting noise, and raising his spines. With these his pursuers pricked their noses till they quarrelled between themselves, and thus gave him an opportunity to escape.

---

### THE BRAZILIAN PORCUPINE.

LIKE the former, this animal is covered with spines, which are white, barred with black ; they are, however, much shorter ; the longest, situated on the hinder parts, being no more than three inches in length. Its chief peculiarity consists in its tail, which is lengthened, naked towards the tip, and endowed with the faculty of curling round any such object as the bough of a tree with so much tenacity, as to aid the creature materially in its climbings, and particularly in descent.

It inhabits the dense and sultry forests of South America, sleeping in its retirement among the thick bowers of leaves by day, and at night coming abroad to feed on fruits. It is easily killed, yet is not attacked without danger, for its quills, which it erects when alarmed, are furnished with minute barbed teeth directed from the point backwards, which make wounds inflicted by them difficult to heal. The points being rather

sharp, no sooner insinuate themselves into the flesh, than the spines separate from the skin of the Porcupine, when every motion causes them to bury themselves deeper into the wound, nor can they be extracted without much pain and trouble.

The flesh of this porcupine is described as white and well-tasted. It is usually very fat; and its habits are sluggish, for though it climbs trees, it performs this



feat very deliberately, holding on at every step with its prehensile tail. Its voice is said to resemble that of a sow. An individual, from which the original of the above engraving was taken, was, some time ago, living in the gardens of the Zoological Society in the Regent's Park.

There is another species found in North America somewhat resembling this, but its tail has no holding

power. Like this, however, it has the habit of climbing trees.

The Brazilian species is sometimes called the Coandu, as that of North America is known as the Urson.

### THE HARE.



THIS well-known animal is found throughout Europe. It has no weapons of defence ; but it is exceedingly timid, and has a quickness of sight and hearing, as well as a swiftness of foot, which are calculated to protect it from its enemies. Its chief enemy is man, who is tempted by these very qualities to obtain a poor triumph over the harmless creature, by destroying it for the purposes of sport. "Whatever excuses may be found for the pursuit of the Fox, on the score of necessity, as ridding

the country of a noxious animal—an excuse, however, which can scarcely be made by those who forbid its destruction by any other means—no such excuse can be made for *this* sport; whilst the degree of danger and difficulty is scarcely sufficient to invest it with enough of excitement to conceal its character of cowardice and cruelty. It is true that coursing is in a degree less cruel, as the poor trembler's agony is comparatively short-lived; but it appears to me that mercy and humanity can scarcely consist with the ardent love of either variety of a sport, the whole interest of which depends on the intense exertion to which a helpless and defenceless creature can be driven by the agonies of fear and desperation.”\*

The Hare feeds on vegetables only, and sometimes does great injury in fields, gardens, and young plantations. Having made its *form*, or bed, it remains on it during the day, leaving it at night to seek its food, and constantly returning, unless caught or killed; hence, it is said, proverbially, that the wounded Hare *goes home to die*. Its colour helps to conceal it amidst the brown dusky vegetation of heaths and woods; and by the same admirable wisdom of the Creator, those species of the Hare which inhabit the snowy regions of the North become wholly white in winter.

Hares can be tamed by a long course of gentleness and kindness; and in a domestic state they are very amusing. The poet Cowper gives an interesting account of three tame hares, which he called Puss, Tiny, and Bess, and which he kept long under his care.

The Hare was reckoned an unclean animal among the Jews.†

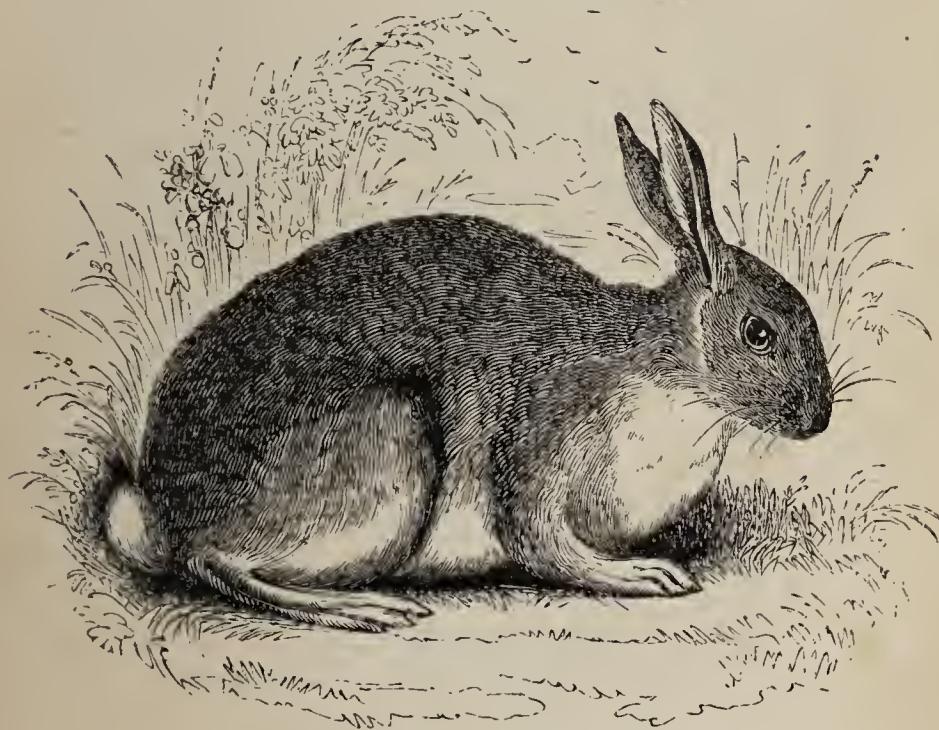
### THE RABBIT.

THIS animal, though like the Hare in some respects, differs from it in size, and in its habits and manner,

\* Bell's British Quadrupeds.

† Deut. xiv. 7.

of living. It finds a shelter in deep holes of its own digging. These are called burrows, which it inhabits during the day, and quits about twilight to feed. A large piece of uneven ground, called a rabbit-warren, may sometimes be seen, everywhere pierced with burrows, containing innumerable families of rabbits. When these creatures confine themselves to sandy tracts, and uncultivated portions of land, they may be safely allowed to increase in numbers; but they are great enemies of



the farmer and the gardener, when permitted to intrude among corn and plants. The damage they do in plantations of young trees, as well as in corn-fields, is often very extensive. They are, however, food for several beasts and birds of prey, as well as for man; besides which, their fur is an important article of commerce. Great havoc is constantly made among them by the gun, the trap, and other means.

The creature called in the Bible, the Coney, is sup-

posed to have been in many respects like the Rabbit. "The conies are but a feeble folk, yet make they their houses in the rocks."\* By this God teaches us, that though persons may not have great strength of body, they may generally be able to do something for themselves ; and thus we may learn, from the industrious habits of some animals, to labour truly to get our own living, and to do our duty in that state of life unto which it shall please God to call us.

---

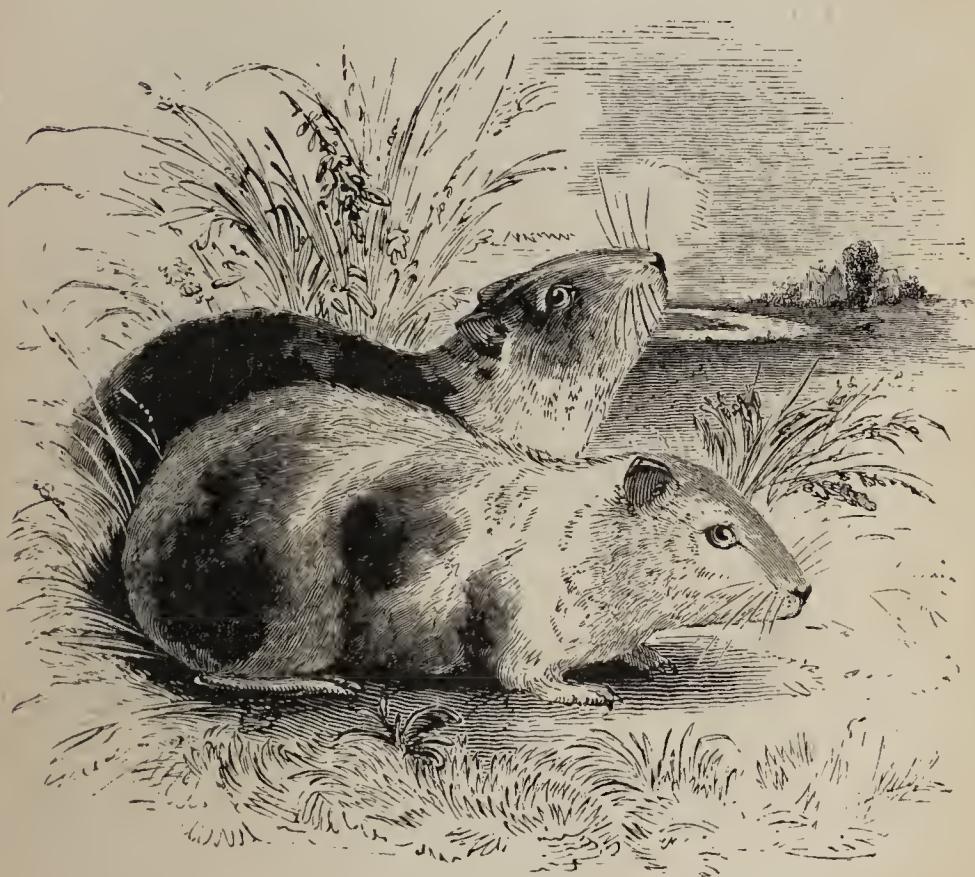
### THE GUINEA-PIG.

THIS little creature, the length of whose head and body is generally between ten and eleven inches, is more properly called, *the Restless Cavy* : indeed, it does not appear that it is mentioned by any naturalist as being a native of Guinea. The country from which it originally came, is the southern part of South America. It is now very common as a domesticated British quadruped. Its pretty red and black marks, on the coarse white bristly hair with which it is covered, added to its quiet and inoffensive habits, seem to make it attractive, especially to children. Its qualities, however, when we examine them, are not valuable. Scarcely ever at rest, it has no intelligence, and cannot be taught ; while its tameness is the effect of stupidity rather than good temper. Its flesh is never eaten in this country, and its hide is of no value.

Some persons keep Guinea-Pigs for the purpose of getting rid of rats, which they suppose, though without sufficient proofs, to have a particular dislike to them, and to quit in disgust the cellar, or stable, in which they are kept.

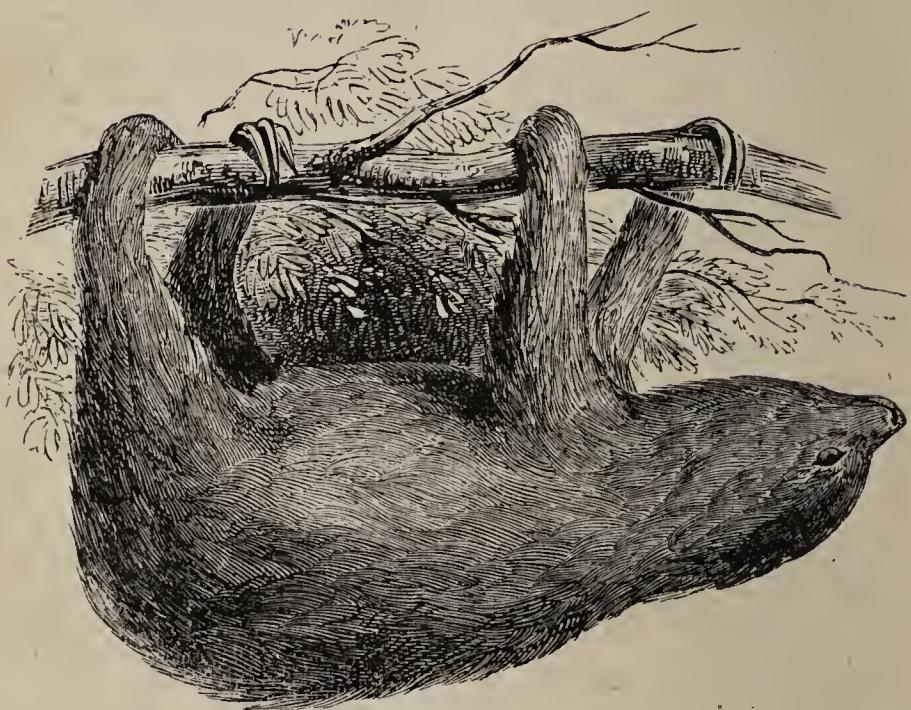
\* Prov. xxx. 26.

In the wilds of South America, Guinea-Pigs are taken in considerable numbers by the natives, for the flesh, which they think excellent; and the animal has neither speed nor sagacity to escape the attacks of beasts or birds of prey.



In the gardens of the Zoological Society, Regent's Park, a portion of ground is fenced off, called *The Guinea Pig Enclosure*, in which there are large numbers of these animals.

## THE THREE-TOED SLOTH.



If this creature deserved its name, we should draw a lesson from it for the use of our young readers, and advise them to shun all idle and slothful ways, as causes of trouble and disgrace. We might well call attention to the account given by the wise king, of the slothful man; and to the exhortation of the Apostle to the duty of industry. (Prov. xxiv. 30—34. Rom. xii. 11.)

But though, at first sight and in some situations, the harmless animal before us may appear to be dull and sluggish, even when in health and strength, a full inquiry into its habits will show that it can enjoy life as much as most other creatures do, and that it affords one among the many living proofs of “THE WISDOM OF GOD MANIFESTED IN THE WORKS OF THE CREATION.” \* The fact is, the Sloth is framed for living among trees, in the manner in which it is seen in the engraving; and those writers

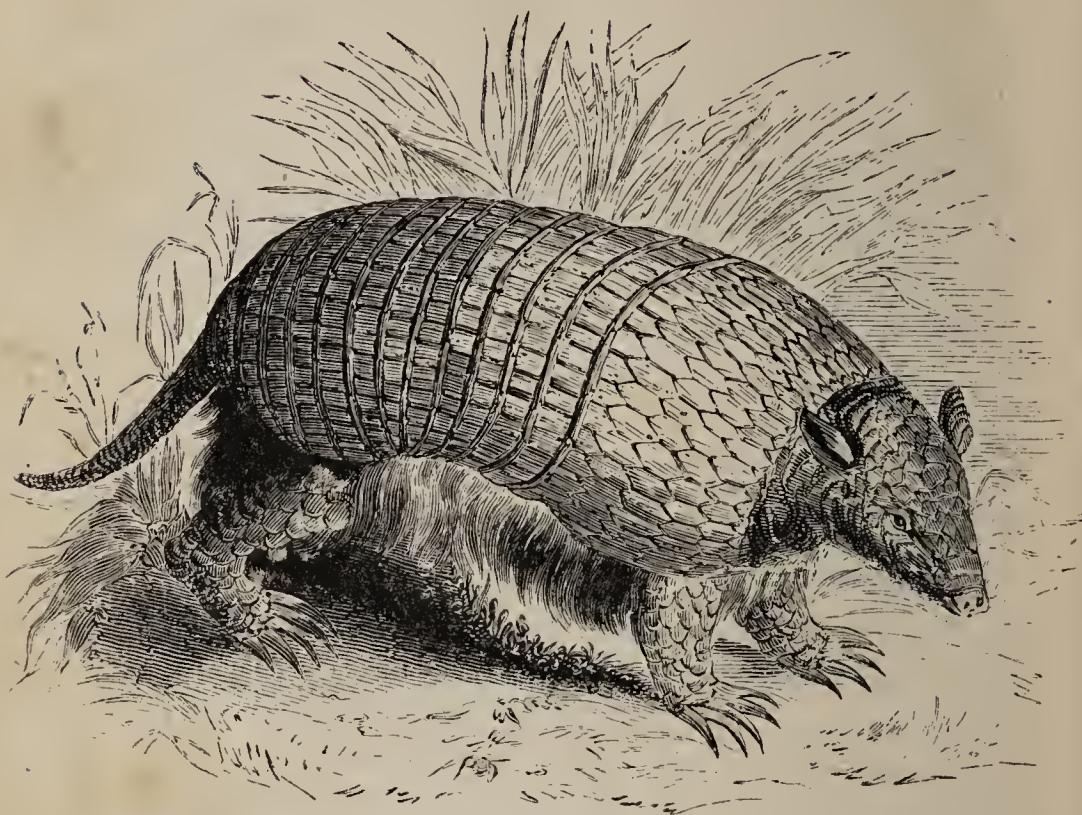
\* The title of John Ray's great work.

who describe the creature as slothful and heavy, have probably seen it only on the ground, and, therefore, viewed it in a posture which is painful to it. The fore-legs are nearly twice as long as the hind ; the foot when placed on the ground does not rest on the sole, but on the edge ; and the toes are armed with large claws, long, sharp, and constantly bent inwards. The animal is, therefore, no more adapted for running upon the branches of trees than it is for walking on the earth. It runs along the branches and under them.

Mr. Waterton, the naturalist, has taken much trouble, first in noticing, and then portraying, the life of the Sloth, which is told in a few words : "He moves suspended from the branch, he rests suspended from the branch, and he sleeps suspended from the branch." His most active time is when the wind rises and brings together the branches of neighbouring trees ; "Then the sloth seizes hold of them, and pursues his journey in safety. He travels at a good round pace ; and were you to see him, as I have done, passing from tree to tree, you would never think of calling him a sloth."\* As he is a great fruit-eater, he is then probably seeking food ; he also eats leaves. The fore-foot is used to convey food to his mouth. His fur has so much the hue of the moss with which the trees in his native forests in South America are covered, that it is difficult to perceive him when he is at rest. The hair is thick and coarse at the surface, but gradually tapers to the root, where it becomes extremely fine. The Three-toed Sloth is about the size of a common cat : it is exceedingly tenacious of life. The flesh is esteemed good food by the Indians. The Sloth is sometimes called the *Ai*, in consequence of its plaintive cry, resembling that word.

\* Waterton's "Wanderings."

## THE ARMADILLO.



THERE are several kinds of Armadillo. One kind has four toes on each foot ; another five : one has twenty-eight teeth ; another has ninety-six. Even the latter, the giant Armadillo, however, is but a pigmy, compared with some species which have been found in a fossil state, and which are now extinct.

The general appearance and habits of the Armadillo may be thus described. Its body is covered with a suit of horny armour, arranged like mosaic work, and formed of various plates ; the pattern of each plate differing in the different species. The limbs are short and thick ; the claws large, sharp, and very strong. The head is flat, and broad between the eyes ; the ears raised, of a moderate size ; the tongue smooth and slender. The armour protects the Armadillo from many dangers to

which it is exposed. It never bites, even when attacked, and has only its claws and armour to defend it from dogs and other fierce animals.

One kind of Armadillo, the *Mataco*, can roll itself up, head and legs included, into a ball. This is a valuable talent indeed for the Mataco, as it does not burrow in the earth as other species of Armadillo do. "The dog," says Mr. Darwin, "not being able to take the whole into its mouth, tries to bite one side, and the ball slips away. The smooth hard covering of the Mataco offers a better defence than the sharp points of the hedge-hog."

The specimen before us, the *Poyou*, or weasel-headed Armadillo, measures about sixteen inches along the head and body : the tail is six or seven inches long. It is so active and strong, that few men can overtake it in running. Like almost all the others of its race, it burrows in the ground. When alarmed it stands still for a moment, then pricks up its ears, and endeavours to gain its burrow ; but if this be too distant, it will begin to make a new one. This it does with great rapidity, particularly in a soft soil. The hunter finds much difficulty in removing it from its hole ; the creature sometimes leaving its tail in his hand. The flesh is considered a great delicacy by the native Indians, and by the Portuguese and Spaniards of South America, who generally roast the Armadillo whole in its shell. But Mr. Waterton says that the flavour is strong and rank. The Armadillo eats vegetables, worms, reptiles, insects. It also feeds on such carcases of animals as it may find on the vast plains of South America, of which it is a native.

Many of our readers must have seen in the enclosures in the gardens of the Zoological Society, some small Armadilloes running about, free from fear, and familiar even with strangers. Moving here and there in a bustling and hurried manner, they turn up the turf with their noses, as if in search of worms or insects. Their food in this country is generally bread and milk. Like other

wonderful works of the Creator, they afford, in their tame and captive state, many curious proofs of the purposes for which they were so marvellously framed by His Almighty hand.

### THE ANT-BEAR.



THIS animal has a narrow head, a small mouth, and a long tongue. The tongue, by means of which it secures its food, is, when unemployed, doubled up in its mouth. It is shy and timid ; but when hungry, it issues from its retreat of dry and withered leaves, and prowls in search of an ant-hill. Its limbs are short, but thick and strong, and well adapted for attacking the dwellings of the Termites, or white ants, on which it chiefly feeds. On seeing its prey, it stretches out its tongue, which is covered with a

gummy fluid, and having collected a number of insects, draws them into its mouth. This process is repeated, the tongue moving to and fro with great rapidity, until a sufficient meal has been obtained.

The Ant-Bear is careful to avoid its powerful enemies, and never provokes a combat ; but when assailed by other quadrupeds, it will defend itself with its formidable claws, with much spirit and vigour. It runs with a peculiar trot, and when chased, will keep a horse in a canter. Sir Robert Schomburgh, who closely observed the habits of these animals, kept one in a tame state, and found it a good climber. It would take up different things with its claws. It ate beef, and pieces of fish cut small. When not asleep, it generally rested on its haunches. Its height was three feet : the length of the head, one foot three inches ; of the back, three feet seven inches ; of the tail, three feet six inches.

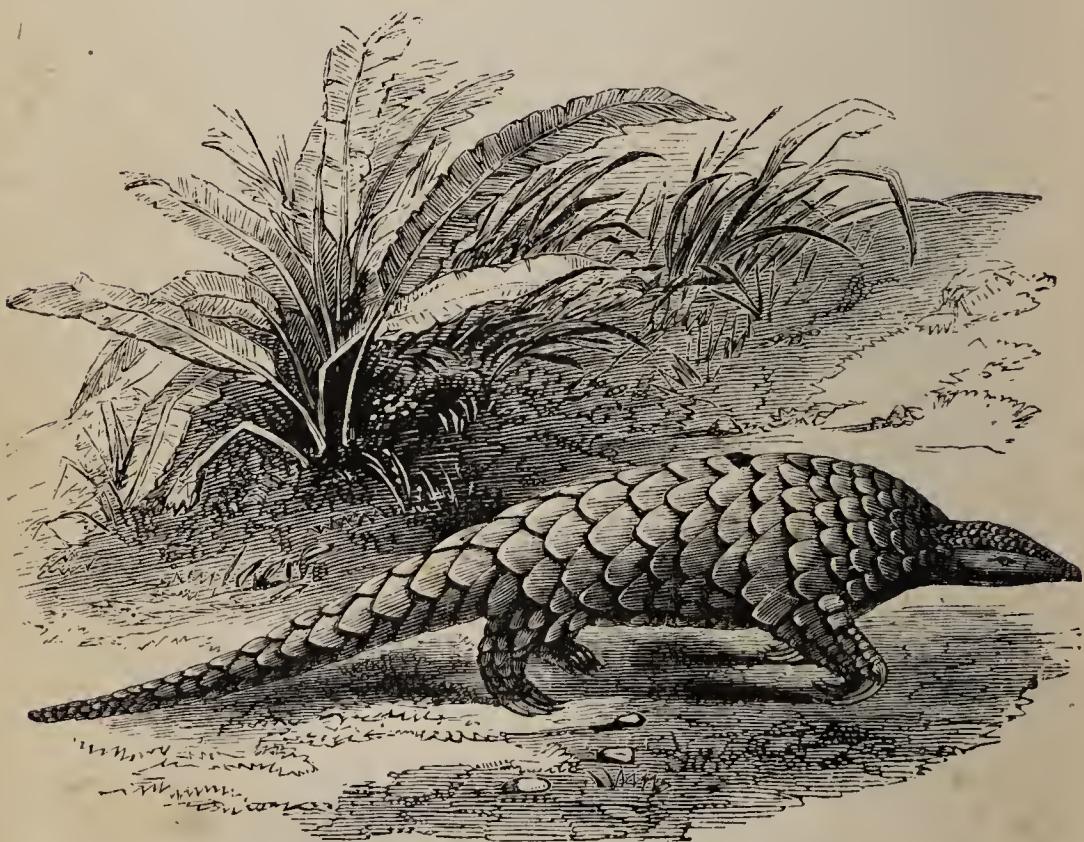
The Ant-Bear is a native of Brazil, Guiana, and Paraguay. The prevailing colour is brown, mixed with black and silvery grey. The tail is long and large. The flesh, though rank and unpleasant to Europeans, is said to be esteemed a delicacy by the Indians.

---

### THE MANIS.

This animal is found in India and Africa. It is a kind of scale-covered Ant-eater, and may be known at once by its armour, consisting of triangular or oval plates overlapping each other, in which the body is locked up. These animals are burrowing in their habits, with thick, short, sturdy limbs. The claws are extremely strong, as if formed for scratching up the ground. The head is broad between the eyes, and has on its top portions of horny mail. The eyes are small, but quick at catching sight of any object ; and when

the creature is alarmed, it either makes for its burrow, or, instead of attempting to escape, rolls itself up into a ball, taking especial care of its head, which is almost the only part liable to injury. Unfurnished with weapons of offence, the Manis defies the assaults of its foes. With its globular form thus packed up, its tail neatly wrapped over its head, and all its pointed and sharp-edged scales put forth in defensive array,



it conquers by passive resistance. Its food consists chiefly of Ants; these it secures in great numbers by extending its tongue into the holes in which they are found. There are several species of these remarkable creatures. The long-tailed Manis, the best-known of the African species, reaches to a large size, measuring about two feet in the length of the body, and about three feet in the length of the tail. The tail of

this strange-looking creature cannot properly be called short ; but it is so, when compared with the long-tailed member of the same family. Temminck's Manis, met with in South Africa, is now rare. The natives have a violent prejudice against it, burning all the specimens they can find. Thus in many places they have almost got rid of the race.

## THE VIRGINIAN OPOSSUM.



WHIMPER

THIS remarkable animal is one of the order called *Marsupialia*; *marsupium* being the Latin word for a pouch, or purse. Indeed, the peculiarity of this group consists in a pouch or bag, in which the female protects her young. In this they remain from the time of their birth until they begin to see ; when they occasionally

venture from their hiding-place, returning to it on the least appearance of danger. Nor do they finally quit the mother until they have reached a considerable size. The Virginian Opossum is common in many parts of North America. It is one of the largest and finest of its race, and is about the size of a cat ; of a grey hue ; the fur thick and soft ; the mouth wide, the eyes small, the nose sharp and long. It rests during the day on the branches and in hollows of trees, and prowls about at night, feeding on small animals, vegetables, and fruits. It is also known to rob the poultry-house ; but it hastens away at the first appearance of dawn.

It suffers in its turn from the attacks of birds and beasts of prey, and is also hunted by man, for the sake of its flesh and fat. We are informed that as soon as the Opossum discovers the approach of its enemies, it lies perfectly close to the branch, or places itself snugly in the angle where two boughs separate from each other. The dogs, however, by their power of scent, detect its presence, and stand barking till the hunter, ascending the tree, violently shakes the branch to which the animal is clinging, till it is obliged to quit its hold. It often pretends to be dead in order to escape from its captors. Gathering itself up into a small compass, it assumes all the stillness, as well as the motionless attitude of death. This ingenious trick, aided by darkness and its own disagreeable smell, often proves successful.

The researches of naturalists in Australia have made us acquainted with many species of marsupial animals which were before unknown.

---

### THE DUCK-BILLED PLATYPUS.

THIS very curious animal partly resembles a quadruped, and partly a bird, and is, on account of its singular

form, called a paradox in nature. It is a native of Australia, and has not been discovered many years. It has a beak like a duck's, engrafted on a quadruped's head, which is similar to that of an otter, though much smaller; the usual length of the head and body of the Platypus, including its tail, being about twenty inches. It is covered with a very thick, soft fur, of a dark brown above, and pale beneath. The tail is flat and furry, and



gradually lessens to the tip. The legs are very short. A broad tough web covers the fore-feet, and extends beyond the claws. These are five in number on each foot, and are straight and strong, suited for hollowing out burrows, which the Platypus digs for itself near a lake or river. It lives chiefly in the water, and is supposed to feed on water-weeds, worms, insects, &c., which it finds in the mud. The hind-feet are smaller and less powerful than the fore-feet, and the web is not carried out beyond the claws of the hind-feet. The animal has no teeth; but on the edges of the beak, attached to the

gum, are fibres serving the purpose of teeth. The tongue is short and thick. The eyes are small but bright, and, like those of the mole, are much hidden by the fur. It dresses its fur, and seems to delight in keeping it smooth and clean. It has been clearly proved by Professor Owen, that the Platypus suckles its young. The young ones sleep in various postures, sometimes lying at full length, and often rolled up like a hedge-hog in the form of a ball.

Mr. Bennet, who procured several of these animals in Australia, gives a pleasing account of their gambols in a cage in which he kept them. "One evening both the animals came out about dusk, and went as usual, and ate from the saucers, and then commenced playing with one another, like two puppies, attacking with their mandibles and raising their fore-paws against each other. In the struggle one would get thrust down ; and at the moment when the spectator would expect it to rise again, and renew the combat, it would begin scratching itself, its antagonist looking on, and waiting for the sport to be renewed."

---

### THE KANGAROO.

THIS interesting and good-tempered animal inhabits Australia, and the adjacent islands. It is fond of wandering about among the grass, and feeds on green herbage, roots, and hay. The greatest peculiarity in the form of the Kangaroo, consists in the extreme disproportion of its limbs ; the front legs being short and weak, while the hind ones are very long and muscular. It goes entirely on its hind legs, making use of its fore-feet only for digging, or bringing its foot to its mouth. It is very timid at the sight of men, who sometimes hunt it with dogs ; it flees from them by amazing leaps of upwards of twenty feet in length, springing over

bushes seven or eight feet high, or going progressively from rock to rock. It carries its tail at right angles with its body when it is moving ; and often looks back during its flight. The tail of the Kangaroo, which is very large, and remarkably thick at the base, helps to support it when in a nearly erect posture.



In this position it is raised, as if on a tripod, by the joint action of the hind legs and the tail. It is quiet and harmless, until attacked : but when obliged to use the means which Providence has given for its defence, it sometimes not only inflicts blows on dogs, so severe as to oblige them to desist from pursuing it, but wounds

them severely with the large and powerful middle claw of its hind foot.

Its flesh is said by the colonists to be good and wholesome; and the plain vegetable food on which it subsists, renders this account probable. Many of our readers may have seen specimens in collections in this country. There were two in the Royal Park at Windsor, which were afterwards in the Tower, and which appeared to be but little affected by the difference between this climate and that of their native country.

The Bishop of Adelaide, South Australia, in describing a large meeting, held in behalf of a new Collegiate School in that place, observed, "It was an animating scene to see so large an assemblage gathered together in the cause of education, *on a spot where, twelve years ago, Kangaroos fed undisturbed.*"

---

## BIRDS.



"HAVING as briefly, as well as I could, despatched the tribe of QUADRUPEDS, I shall next take as brief and transient a view of the FEATHERED TRIBE. And here we have another large province to expatiate in, if we should descend to everything wherein the workmanship of the Almighty appears. But I must contract my survey as much as may be, and shall therefore give only such hints and touches upon this curious family of animals, as may serve for samples of the rest of what might be observed."—*Physico-Theology*, by the Rev. W. Derham, 1711.



## THE CONDOR.



THE Condor was very imperfectly known to naturalists until the beginning of the present century. Exaggerated statements were made of the enormous size and rapacious habits of this species of Vulture ; but a modern traveller, Baron von Humboldt, in describing the bird such as it really is, has corrected the accounts which had been received, and which had found a place in several useful and interesting works of Natural History.

The Condor is chiefly met with in South America, inhabiting lofty and snow-covered mountains, at an elevation of from 10,000 to 15,000 feet above the level of the sea ; and when driven by hunger, descending into the plains, which it quits as soon as it has satisfied

its appetite, as if unable to endure the heavier atmosphere and warmer climate below.

Though there is no sufficient authority for the stories of Condors having carried off young children, and even attacked men and women, the boldness and ferocity of these birds are extraordinary. Two of them acting together will frequently attack a puma, a llama, a calf, or even a full-grown cow. They will follow up the poor animal, allowing it no respite, but tearing it with their beaks and talons, till it falls, worn out with fatigue and loss of blood. After feeding with disgusting greediness on their prey, they are often unable to fly.

The Indians, for sport, sometimes place in sight of a troop of three or four Condors the carcase of a horse or cow, by way of bait. As soon as the birds have finished their meal, and are unable, from the quantity they have eaten, to use their wings, the hunters appear, armed with a lasso, or rope, which they slip round the birds' necks, and thus secure them.

M. Humboldt states that the Condor is very tenacious of life. He saw one strangled with a lasso, and hanged on a tree, the Indians pulling it violently by the feet for several minutes ; but on the removal of the lasso, the bird got up and walked about as if unhurt. It was afterwards shot at four paces off, with three pistol balls, all of which entered its body ; but it kept its legs till a ball struck its thigh. This act was exceedingly cruel, and admits of no defence. It is mentioned here for the purpose of proving the creature's tenacity of life : but such treatment of a defenceless animal must be condemned as cowardly and cruel.

The Condor makes no nest, but lays its eggs, two in number, upon the bare shelf of a rock. The young are nearly naked when hatched, but are soon plentifully covered with black down. The colour of the first plumage is a yellowish-brown, which deepens into a black grey by the time the bird is three years old.

## THE EGYPTIAN VULTURE.



THIS bird is of a family of loathsome feeders, to which the most putrid carrion is welcome. It is this which makes them highly useful in certain countries, where decayed animal remains would infect the air in the most dangerous manner, were it not that these winged "scavengers" are glad to clear the streets of filth of every kind. The value of such birds in Egypt and other parts of the East, where they undertake this unsavoury task, in common with the pariah dogs, has often been alluded to by travellers; and it is remarkable that Homer, in the Iliad, alludes in the same line to dogs and vultures, as sharing in the repast of the slain. It was, probably, in consequence of its services in this way, that the Vulture was ranked among the sacred animals of Egypt. It is often figured on the Egyptian monuments. Hence the appellation of

Pharaoh's Chicken, as it is called by Bruce and others. It frequents the shambles, searching after carrion, attending where dead bodies are to be found, and gorging itself to such a degree with the foulest diet, that after a full meal it becomes sluggish and unwieldy, and scarcely able to raise itself from the ground. The long and ample wings of the Egyptian Vulture give it amazing powers of flight, and enable it to sweep with astonishing speed and precision from a great height in the air to the object of its pursuit. Naturalists do not appear to have settled the question whether it is the acuteness of sight or of smell that guides the bird to its prey. Both senses are most probably possessed by it in a high degree of perfection. Job calls our attention to the Vulture's eye. "There is a path which no fowl knoweth, and which the Vulture's eye hath not seen."\* And Isaiah illustrates one of his prophecies with the presence of this ill-omened bird. "There shall the Vultures also be gathered."† In the neighbourhood of Gibraltar, and in the south of Spain, flocks of this Vulture are annually seen. It is thought that they winter in a warmer climate. The size of the Egyptian Vulture does not much exceed that of the common Rook of Europe.

---

### THE GOLDEN EAGLE.

THIS rapacious bird is found in various parts of Europe, building its nest in clefts of rocks or on lofty trees, and sweeping the country round in search of the living animals on which it feeds. It is met with in North America, and is said to be also an inhabitant of Asia Minor and North Africa.

It is properly classed among British birds, as it is occasionally seen in some parts of England, and is more common in Scotland and the Scottish isles. Mr. Mudie, in his "Feathered Tribes of the British Islands,"

\* Job xxviii. 7.

† Isa. xxxiv. 15.

mentions the higher glens of the rivers that rise on the south-east of the Grampians, the high cliff called Wallace's Craig, on the northern side of Lochlee, and Craig Muskeldie, as places frequented by the Golden Eagle.



The flight of this bird is very majestic and powerful. Mounting to a great height, it descends upon its victim with overwhelming rapidity and force, and, if it be not too heavy, bears it off in its talons to its nest. This nest is on some flat platform of rock, or other elevated site, and is composed of sticks apparently thrown together at random, forming a rude receptacle for the eggs and young.

The length of a full-grown male Eagle is nearly three feet ; the female is still larger. From the great strength and size of the bird, it preys with ease on fawns, lambs, hares, and other game ; sometimes on fish, but rarely on anything which it finds dead. One of them boldly descended in the sight of some sportsmen in the neighbourhood of Ben-Lomond ; and, notwithstanding their

shouts and threats, carried off a Red Grouse, which they had slightly wounded.

The Rev. Dr. Gilly, in his “Second Visit to the Vaudois,” relates the case of an infant who was carried away by an Eagle from one of the rich Alps, or mountain pasture lands which overhang the Durance, near Briançon. The distressed parents, in whose absence the event occurred, knew not what had become of their baby, and the child, in whose care it had been left, was dumb, and could not make them acquainted with the dreadful fact. But on the morning on which it had happened, an Alpine hunter,

“ Whose joy was in the wilderness, to breathe  
The difficult air of the iced mountain’s top,”

had been watching near an Eagle’s nest, with the hope of shooting the bird on her return to her young. On her nearer approach, he heard the cries and distinguished the figure of an infant in her frightful talons. In an instant his resolution was formed, to fire at the bird the moment she should alight on her nest, and rather to kill the infant than allow it to be torn to pieces by birds of prey. With a silent prayer, and a steady aim, the mountaineer poised his rifle. The ball went directly through the Eagle ; and in a minute afterwards he snatched the infant away, and took it to its mother. The poor babe was wounded in the arms and side, but it afterwards recovered.

The female bird is said to be very attentive to her young ones, until they are able to take care of themselves. The Golden Eagle may be tamed without much difficulty ; in several instances they have been trained to catch hares, rabbits, and other game.

The allusions to the Eagle in the Bible are frequent. God’s care of His people is set forth, in the Song of Moses, under the following similitude :—“ As an Eagle stirreth up her nest, fluttereth over her young, spreadeth abroad her wings, taketh them, beareth them on her wings ; so the Lord alone did lead him.”\*

\* Deut. xxxii. 11, 12.

## THE HARPY EAGLE.



NHINER

THIS noble bird, the most magnificent of the Eagle tribe, is distinguished from other Eagles by the shortness of its wings, the great robustness of its legs, and the extraordinary curve of its beak and talons. Linnæus, quoting from Hernandez, says, that it is equal in size to a common ram, and that it is able to split a man's skull with a single blow of its beak. We are also told that it carries off in its talons fawns and other young quadrupeds; and that it is so bold as to attack even man himself.

A specimen of the Harpy Eagle, in the possession of the Zoological Society of London, is stated to have been found in South America, but to have been rare in that part of the world. Indeed, when its tremendous powers of destruction are considered, it appears to be a happy circumstance that the creature is nowhere common. Living in solitude, in the depth and darkness of the forests, it is seldom disturbed by the eye of curiosity.

In captivity there is little to distinguish its manners from those of other birds of its tribe. One taken from the nest became so tame as to suffer its head to be handled and scratched ; but in its passage towards Europe, it was killed, as was supposed, by the sailors, whose monkeys it had destroyed and devoured.

---

### THE PEREGRINE FALCON.

THIS species is called Peregrine, from a Latin word signifying *a foreigner*, because it has been found in very distant parts of the world. The Peregrine Falcon is more common in Scotland than in England. In this country it makes its nest on the high cliffs near the Needle Rocks in the Isle of Wight. It is met with in Devonshire and Cornwall, and is said to be also an inhabitant of rocky situations in Ireland.

It is this species which is generally used at the present day by persons who still occasionally pursue the diversion of hawking—an ancient sport, in which one bird is taught to attack and destroy others. Its extraordinary powers of flight, as well as its habits, are thus illustrated by Walton, in his “Complete Angler” :

“ In the air, my noble, generous Falcon ascends to such a height as the dull eyes of beasts and fish are not able to reach to; *their* bodies are too gross for such high elevation ; but from which height I can make her

to descend by a word from my mouth, which she both knows and obeys, to accept of meat from my hand, to own me for her master, to go home with me, and be willing the next day to afford me the like recreation."

The Peregrine Falcon is sometimes seen to follow the sportsman, and carry off birds as soon as they are shot ; showing no alarm at the discharge of the gun.



The female Peregrine is called the Falcon from her greater size, power, and courage, and is usually flown at herons and ducks : the male Peregrine, being much smaller, sometimes one-third less, is called the Tercel, or Tiercel, and is more frequently flown at partridges, magpies, and such humbler game.

The whole length of a full-grown Peregrine Falcon is from fifteen to eighteen inches.

Sir John Sebright, in his "Observations on Hawking," says, that a well-stocked heronry, in an open country, is necessary for this sport, which was witnessed in its greatest perfection a few years since, at Diddington, in Norfolk, the seat of the late Lord Berners, formerly Colonel Wilson.

---

### THE KITE.

THE Kite is of the falcon tribe, and is a bird of prey, feeding entirely on animal food. There are a great many species of this tribe, but the Kite is easily known, even when at a distance on the wing, by its long and forked tail. It is about twenty-six inches in length. The flight of this large bird is very graceful and easy. It soars to a great height, making circles as it mounts in the air.

In its mode of taking its prey the Kite differs from falcons and hawks in general, by pouncing upon it on the ground. The kind of creatures which it eats makes this habit necessary. Twenty-two moles have been found in the nest of a Kite, besides frogs and unfledged birds : it preys also on leverets, mice, snakes, and young game. In consequence of its fondness for this latter dainty, gamekeepers are always glad of the opportunity of killing it, so that it is rare in many parts of England. Like the sparrow-hawk, it frequently visits the poultry-yard ; but the hen, like a good mother, is so bold in guarding her chickens, that she often drives the cruel Kite away.

This bird sometimes takes fish out of rivers, and alights on the bank to eat them, or carries them to its nest, which is formed of sticks, and lined with feathers and other soft materials, and is usually placed in the forked branch of a tree in a thick wood. Two or three eggs, of a dingy white, marked with a few brown spots,

are laid early in the season. The nest is well defended by the parent Kite. A boy who climbed up to one had a hole pecked through his hat, and one hand severely wounded, before he could get at the young birds.

The Kite may be tamed, and then becomes very docile and agreeable, showing remarkable attachment to



its owner; and when suffered to fly returning willingly as soon as called.

The Swallow-tailed Kite, a very elegant bird, is a native of the Southern States of North America, and very rarely visits this country.

The Kite was reckoned an unclean bird among the Jews, and might not be eaten.\*

\* Lev. xi. 14.

## THE BARN OWL.



THE Barn Owl is a very useful bird, and may be called the farmer's friend ; for it clears away the mice from the corn and the fields as well as a cat could do. Its dwelling for the greater part of the year is in barns, hay-lofts, or out-houses. It sometimes takes up its abode in an old ruin, the tower of a church, a hollow tree, or some such lonely place, but prefers the neighbourhood of the farm.

At dusk, the Owl begins to seek its food. It seldom goes out in the day-time, because it cannot see clearly in the light ; and if it does go out in the day, other birds often tease and torment it. The eye of the Owl is extremely large, and is contained within a bony case, in form something like the frame of a watch-maker's

eye-glass,—its large size and remarkable construction allowing free entrance to every ray of light; and this bird consequently has the power of seeing at times when most animals, on account of the darkness, are unable to distinguish one object from another. We may sometimes hear it at night, hooting or screaming as it goes its rounds.

When it sees a mouse in the field, it drops down upon it, and bears it off to its nest. The extremely downy nature of its feathers, and peculiar lightness of its bones, allow it to drop to the ground with so little noise or disturbance of the air, as to render its success in taking its prey by surprise nearly certain.

The Barn Owl may be easily tamed, and if properly fed will live for years ; when once it becomes attached it will not fly away should it be left at liberty, but will testify its fondness for its owner. A tame Barn Owl has been known to contract a friendship for a pet skylark, which it allowed to perch on its back, although it would kill and eat any other small bird that came in its way.

We have spoken now of the English Barn Owl, which generally weighs about twelve ounces, and has its legs covered with down, like wool.

Bishop Stanley says that there are upwards of sixty species of Owls in different parts of the world ; such as the great Snowy Owl, which, from its size and noble appearance, he calls "the very king of Owls ;" the Horned Owl ; the Short-Eared Owl ; the Smooth-Headed Owl ; and the Supercilious Owl. This last-mentioned Owl is a native of South America, and its habits agree with those of the rest of its tribe. Some of the finest Owls in this country are preserved in the ancient keep of Arundel Castle, Sussex.

## THE GREAT SNOWY OWL.



THE Snowy Owl is so called from the whiteness of its feathers. Being quite white, with the exception of some dots and streaks of a dull brown, it is scarcely distinguished from the snow, as it glides quickly but silently above the plains. We are told by a naturalist that it is not at all liked by the sportsman, whom it will follow about for a whole day, perching itself on the highest trees out of danger, and then pouncing down when a bird has been shot, to carry off the prize before the sportsman can reach it. Another writer says, that

the bird may be seen moving slowly above shallow rivers, or sitting on a rock raised a little above the water, watching for fish, which it seizes with its long black claws, seldom missing its aim. Its voice is so dismal, that, as Pennant observes, it adds horror even to a Greenland winter.

Some Owls fly abroad in the day-time, as well as in the twilight : and this is the habit of the Great Snowy Owl. It is found in the Arctic regions, and other places in which it would suffer much from the severe cold, were it not for its thick soft coat of snow-white feathers. It is also seen in the United States of America, in Greenland, and the islands of Orkney and Shetland.

As the smaller species of Owls hunt for mice and such small prey, this "great Northern hunter" pounces upon hares, rabbits, squirrels, ducks, grouse, partridges, &c. It also preys upon fish, which it is seen to catch by clawing rapidly from the stream such as swim near the surface. Its weight is generally from three to four pounds. Its length of wing, and the strength of its quill-feathers, enable it to fly with more swiftness, and to remain in the air for a longer time, than any other kind of Owl is able to do.

Mr. Gosse, in speaking of Owls, observes, "They are readily distinguished by the largeness of their globular head, their flattened face, their large and dilated eyes, situated at the bottom of a shallow cone of feathers, their round beak almost hidden in these feathers, their sharp, curved talons, their soft, unwebbed, puffy plumage, and the peculiarly silent character of their flight. Their wide pupil is ill fitted for vision in the clear daylight, during which they sit erect and motionless, winking their eyes with a ludicrous gravity : and if disturbed at this time, as if conscious of their disadvantage, they seem unwilling to fly, but stare upon the intruder, draw themselves into a more erect attitude, and make odd gesticulations and hissing sounds. But

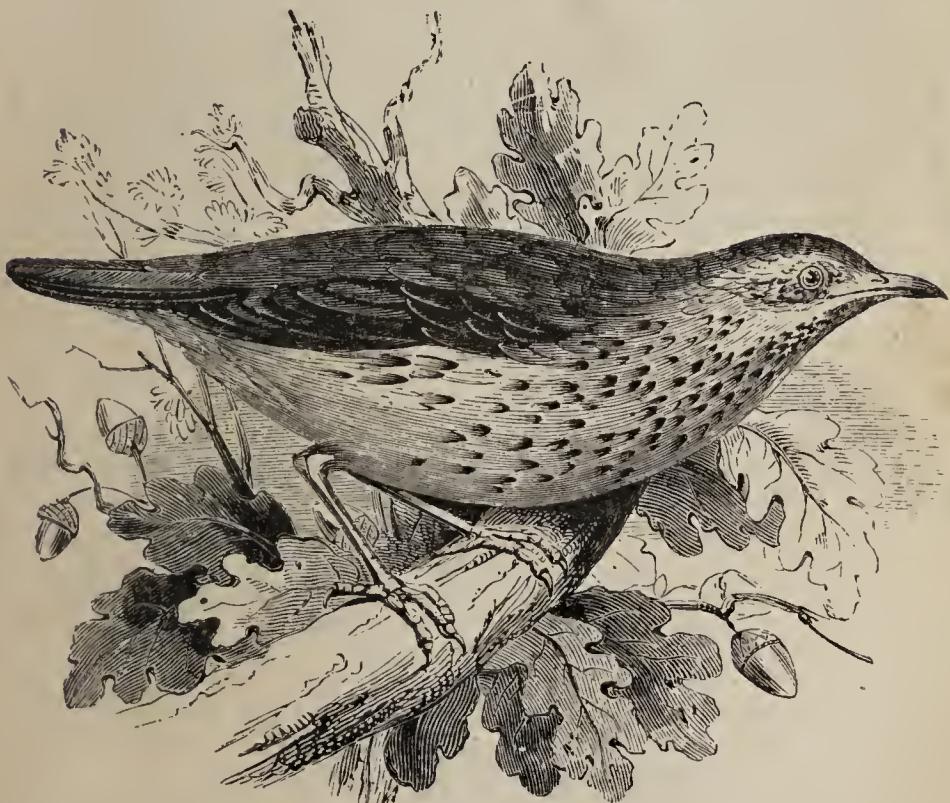
on the approach of evening all this awkwardness and apparent stupidity vanishes ; they become watchful, lively, and animated ; with the eye dilated like a moon, they investigate every corner, gliding to and fro with great activity, lowering and protruding their head in all directions."

---

### THE THRUSH.

THE Song Thrush is of the family of the *Merulidæ*, and is sometimes called the Throstle and the Mavis. In England there are seven species of the Thrush family : 1, Missel Thrush ; 2, Field Fare ; 3, Song Thrush ; 4, Redwing ; 5, Ring Ousel ; 6, Blackbird ; 7, Water Ousel, or Dipper. The Song Thrush is a more sociable bird than any of the others, and is a splendid singer. Its notes are varied and of long continuance. It is found over the greater part of Europe. It emigrates from Norway, Sweden, and the Northern districts, but is a settler in our island, as well as in France, Italy, and other parts of the South. As the winter advances, flights of these birds arrive in Great Britain, and, after staying a few days, unless the winter is mild, move southwards. The native English Thrush begins building its nest in March, and this, if undisturbed, it will do almost within sight of our windows. Bishop Stanley tells us of a Thrush in Scotland, commencing a nest amongst the teeth of a harrow, which had been left with other farming implements by some carpenters on the joists of a shed over their heads. The next morning, the female was found sitting on one egg, in her half-finished nest, the lower part of which alone was plastered and completed. The nest of the Thrush, however, is generally placed in a thick bush amidst clustering ivy or closely tangled branches. Thrushes breed very fast : a single pair have been

known to build five nests (one of which was destroyed) and to rear seventeen young in the course of a season. Grubs, worms, and snails compose the chief food of these birds, though they are sometimes glad of holly berries and mistletoe. The above-mentioned writer affords his readers an amusing description of the manner in which an old Thrush, after pouncing suddenly down upon a lawn after the rain, lays his plans, and hops, and taps the ground with his beak, and listens for a



while "motionless as a stuffed bird," until a fine worm is drawn forth; the poor worm having made its way to the surface, in fear of its underground enemy the mole, whose approach this disturbance was thought to signify. The Thrush is fond of the common garden snail, and will beat the shell violently against a stone to get at the contents.

## THE REDBREAST.



Who is not acquainted with Robin? and who does not wish to know more of his habits? Some of the earliest rhymes which we loved to hear in childhood are about this interesting little bird. We see him in the field, the wood, and the garden; there is scarcely a hedge without a Redbreast; and he is fond of building his nest in gardens and shrubberies, close to the dwellings of man.

The whole length of the bird is five inches and three quarters. In summer he feeds on worms, various insects, fruit, especially cherries, and such berries as he can find. In winter he often appeals to man, in his own gentle yet confident manner, for food; for in that dreary season—when the ground is covered with snow, and worms are difficult to be got at, and there is no fruit, and berries are scarce,—he is glad to receive a welcome in a hospitable country-house, or a nice snug cottage, and

to be invited to share the crumbs which are freely thrown for him to pick up.

With his dark full eye, and sidelong turn of the head, and sagacious inquiring look, enters Robin, while the family are at breakfast ; they see him with pleasure, and scarcely stir till he has gained more assurance : this he soon does, when kindly welcomed.

“——Then hopping o'er the floor,  
Eyes all the smiling family askance,  
And pecks, and starts, and wonders where he is.” \*

The nest of the Redbreast is formed of moss and dried grass, lined with hair, and sometimes a few feathers. The eggs are from five to seven in number, white, spotted with pale reddish-brown. This bird sometimes makes a strange choice of situation for its nest. In Stanley's History of Birds,† is an engraving of a Redbreast sitting in her nest, in the folds of one of the window-curtains in a dining-room ; this “household bird, with the red stomacher,” having actually selected that position for rearing its helpless brood ! And who could abuse such confidence ?

As to their singing, White of Selborne tells us that “Redbreasts sing all through the spring, summer, and autumn. In the two former seasons their voices are drowned and lost in the general chorus. In the latter their song becomes distinguishable.” The notes are sweet and plaintive, but not powerful.

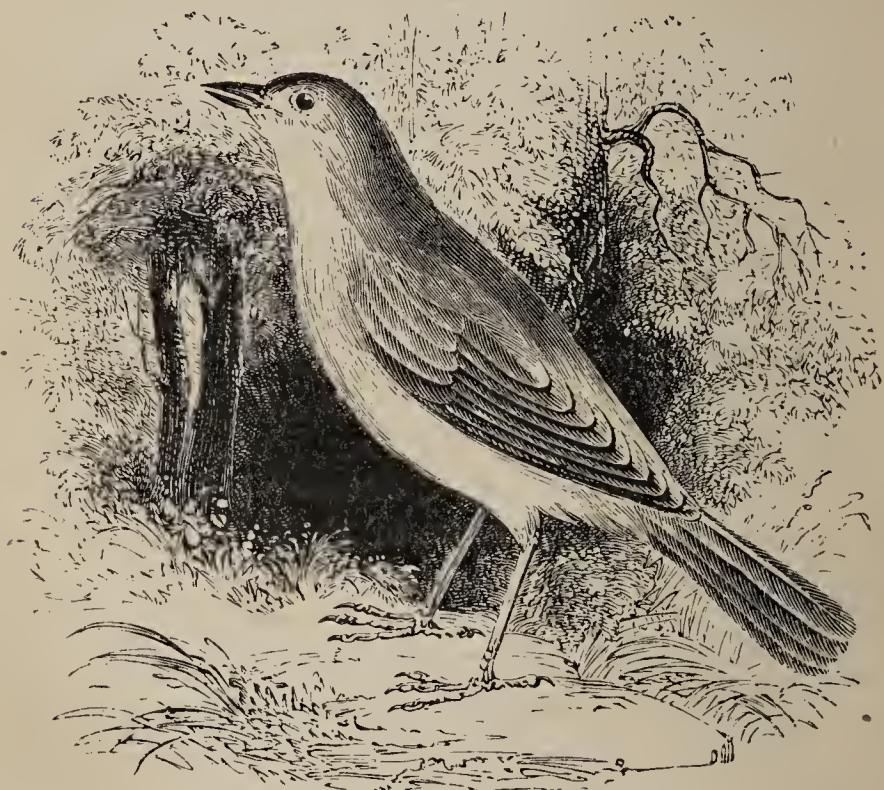
### THE NIGHTINGALE.

THE Nightingale is universally allowed to be the most delightful singer of all the tribe of Warblers. This is a very extensive tribe of birds, most of which migrate at the approach of cold weather to warmer climates than ours. The Nightingale usually visits England in the beginning of April, and leaves it in August or September.

\* Thomson.

† Ed. 1840, vol. ii. p. 33.

It has been so long celebrated for the charms of its music, that the idea of harmony seems associated with its name. It begins its song in the evening, and often continues it during the whole night. Its fondness for a particular place is remarkable. It is said that during several weeks together, it will, if undisturbed, perch on the same tree, and from thence pour forth, evening after evening, its beautiful notes.



The Nightingale is a solitary bird, and though often heard, is comparatively seldom seen. The colour of its plumage is such as to prevent its being easily discovered on a branch. Hence it has been elegantly styled "the sober-suited songstress." The head and back are of a rich hair brown, tempered with an olive hue; the throat and breast are of a glossy pale ash colour; the tail of a reddish-brown; the eyes are large and bright. The length of the bird is about six inches. It feeds on insects, worms, and grubs. Its nest is a

slight structure of grass and leaves built near the ground ; the eggs are four or five in number, and of a smooth olive brown colour.

Mr. Bingley observes, "It is very remarkable that all the gay and brilliant birds of America should be entirely destitute of that pleasing power of song which gives so peculiar a charm to the groves and fields of Europe." The same writer informs us, that a caged nightingale continues its season of singing for a much longer period than those which he heard abroad in the Spring, and that it sings more sweetly than they.

Milton calls this bird "most musical, most melancholy."

But the poet Coleridge says :

"'Tis the merry Nightingale,  
That crowds, and hurries, and precipitates,  
With fast thick warble, his delicious notes,  
As he were fearful that an April night  
Would be too short for him to utter forth  
His carol, and disburden his full soul  
Of all its music !"

The famous anatomist, John Hunter, carefully dissected several Nightingales, and found the muscles of the organ of voice exceedingly strong. In the best singers these muscles were the strongest.

---

### THE LONG-TAILED TITMOUSE.

THIS is one of the family of the *Paridæ*. Birds of this species are found throughout the whole of Europe, many parts of Asia, and in the British Islands. The Long-tailed Titmouse has different names in different countries. Many of these names are very whimsical. Its modern British titles, in various parts of this country, are as follow :—Bottle Tit, Bottle Tom, Long-tailed Farmer, Long-tail Mag, Long-tail Pie, Poke-pudding, Huckmuck, and Mum-ruffin. The food of this little bird consists of insects and their eggs, of

which it seems to be in constant search among the branches. Who has not noticed its quickness and activity when creeping like a mouse among the branches, clinging in all attitudes to the twigs, prying into every little crevice, and examining with the utmost care and nicety the bark, buds, flowers, and fruit which it meets with in its course? Gilbert White remarks that this



bird does not resort, even in severe weather, to houses or their neighbourhood. But, as an exception to this rule, a writer in the Penny Cyclopaedia observes,— “We have seen in a nursery-garden in Middlesex a whole family of them within a few yards of the nurseryman’s cottage, and close to his greenhouse, which visitors

were constantly entering ; and we have found its exquisitely-wrought nest in a silver fir about eight feet high in a pleasure-ground, in the same county, little more than a hundred yards from the house."

The nest of the Long-tailed Titmouse is a most charming piece of workmanship, combining beauty of appearance with security and warmth. It is nearly egg-shaped, with one small hole in the upper part, by which the bird enters ; occasionally there is a second hole in the under side of the nest, which is supposed to be for the purpose of ventilation. The outside of the nest sparkles with glossy lichens fixed to a texture of moss and wool. The inside is thickly coated with soft feathers. The female is the nest-maker, and generally lays ten or twelve eggs : these are small and white, and sometimes have a few pale red specks.

---

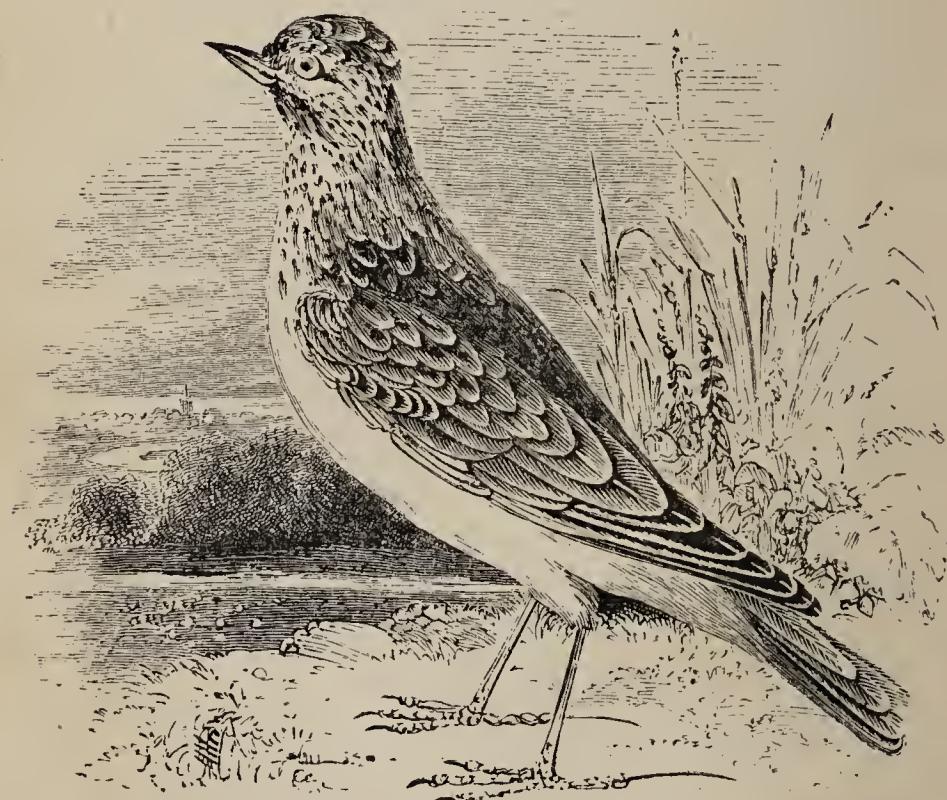
### THE SKY-LARK.

ALL the members of the Lark tribe are musical, The Wood-Lark has a sweet and plaintive tone, but its voice has neither the power nor the variety of the Sky-Lark, which is more generally known, being an inhabitant of most, if not all the countries of Europe.

"In early spring," says Mr. Yarrell, "its cheerful and exhilarating song, fresh as the season, is the admiration of all. The bird rises on quivering wing, almost perpendicularly, singing as he flies, and gaining an elevation that is quite extraordinary ; yet so powerful is his voice, that his wild joyous notes may be heard distinctly, when the pained eye can trace his course no longer. An ear well accustomed to his song can even then determine by the notes whether the bird is still ascending, or remaining stationary. When at a considerable height, should a hawk appear in sight, or the well-known voice of his mate reach his ear, the wings are closed, and he drops to the earth with the rapidity of

a stone. Occasionally, the Sky-Lark sings while on the ground ; but his most lively strains are poured forth during flight ; and even in confinement this would-be tenant of the free air tramples his turf, and flutters his wings while singing, as if muscular motion were with him a necessary accompaniment to his music."

Izaak Walton beautifully says of the Lark, "When she means to rejoice, to cheer herself, and those that



hear her, she quits the earth, and sings as she ascends higher into the air ; and having ended her heavenly employment, grows then mute and sad to think she must descend to the dull earth, which she would not touch but for necessity."

The food of this bird consists of grain, seeds of grasses, various insects, and worms. The nest is generally placed on the ground, sheltered by a tuft of

herbage, or a clod of earth ; the eggs are four or five in number, of a greyish-white, tinged with green, and mottled with darker grey and ash-brown. The Sky-Lark rears two, and occasionally three broods in the year. The parent birds are strongly attached to their young ; instances are known, not only of a Sky-Lark encountering danger for the sake of its tender brood, but removing the eggs, and even the young, to some other spot for safety.

Sky-Larks congregate in flocks of thousands when the cold weather comes on, and being at this time very fat, they are shot in large numbers for the market.

---

### THE HOUSE SPARROW.

THE Common Sparrow is met with throughout the year, and finds its home among the habitations of men ; the roof of the royal palace and of the homely cottage being alike subject to its visits. The Sparrow, however, which is reared in the smoky city, and is so bold and familiar, affords but a poor example of the colours that adorn the rustic bird which is seen in the cottage-garden, or at the farmer's barn-door.

The nest of the Sparrow is formed under the eaves of tiles, in holes or crevices in the wall, or in any hollow place which will allow of sufficient room for the mass of hay and feathers collected for the dwelling of its family. Sometimes the nest is fixed in a tree near a house. So fond is this bird of warmth, that large quantities of feathers are used even to line a hole for it, on the inner side of the thick thatching of a barn ; and it has been seen collecting feathers in winter, and carrying them away to its home.

The young are fed with soft fruits, tender vegetables, and insects, particularly caterpillars ; and so great is

the number of destructive insects consumed by the parents and their brood, that it is believed the good thus performed produces a balance in the bird's favour against the loss it occasions by devouring the grain and seeds which it requires at other seasons of the year, and of which it robs the farmer.

The great attachment of the parent birds to their offspring has been frequently noticed. It is recorded,



that, a few years since, a pair of Sparrows, which had built in the thatched roof of a house at Poole, were observed to pay their visits to the nest long after the time at which the young birds generally take flight. This unusual circumstance continued throughout the year; and in the winter, a gentleman, on mounting a ladder, found one of the poor little birds detained a

prisoner by means of a piece of string or worsted (part of the nest), which had got accidentally twisted round its leg. Being thus prevented from obtaining its own food, it had been sustained by the constant exertions of its parents. This simple anecdote may recall to the minds of some of our young readers many instances of tender care and attention shown them by a kind father or mother in the times of their greatest need.

The Psalmist alludes to the Sparrow, as finding a shelter in the sanctuary ;\* and in another Psalm, when in affliction and solitude, he says : “I watch, and am as a Sparrow alone upon the house-top.”

---

### THE GOLDFINCH.

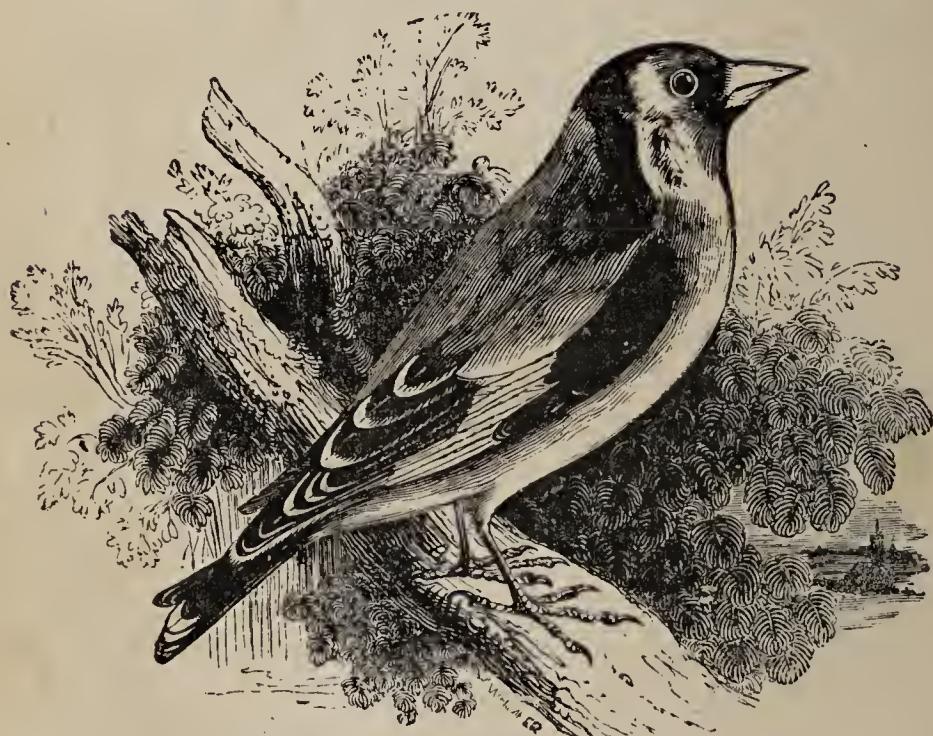
THIS is one of the most beautiful of British birds, and is also one of the most docile and agreeable. The species is common, but not so abundant as many others of “the Finches.” The Latin name, *Carduelis*, is given to this bird from its fondness for the seed of the thistle (*carduus*). It is found generally in the British islands, and is less plentiful towards the north, where wood and cover become scarce. It loves to frequent gardens and the shrubbery, often placing its nest in a fruit-tree, and near some place in which cheerful work is going on. But in the winter, parties of fifteen or twenty of these little birds may be met with on commons or pasture fields, where thistles, ragweed, and similar plants have flourished, and on the seeds of which they feed. It is on such spots that the Goldfinch is taken by bird-catchers in trap cages, or with limed twigs, a call-bird being used to lure it to its prison.

It is soon reconciled to its loss of freedom, and being intelligent and obedient, as well as musical, amuses its

\* Psalm lxxxiv. 3.

† Psalm cii. 7.

master not only by its song, but often by its entertaining ways. If kindly treated, it loses all fear, and may be taught to draw up water in a small bucket. Goldfinches have been trained to go through a kind of play, and, after feigning themselves dead, to jump up again at the proper time ; though this sort of training must, we fear, be attended with cruelty. There is quite enough of what is curious for us to examine and admire in the



nature and habits of animals, without working on their apprehensions in order that we may laugh at their mimic representations. How much is there to admire in the Architecture of Birds !

“Behold a bird’s nest !  
Mark it well, within, without.  
No tool had he that wrought, no knife to cut,  
No nail to fix, no bodkin to insert,  
No glue to join : his little beak was all.  
And yet how neatly finished ! What nice hand,  
With every implement and means of art,  
Could compass such another ?”

Some small birds, including the Goldfinch, have been styled *felt-making birds*; the texture of their nests being similar to that of a hat, or a piece of double-milled woollen cloth. Birds will, in general, take such building materials as they can most easily procure. A naturalist informs us that he noticed a pair of Goldfinches beginning to make their nest in his garden, forming the groundwork of moss, grass, &c., but on his scattering wool near them, they left off their own stuff, and used the wool. He then gave them cotton, which they preferred to the wool. "The third day," he says, "I supplied them with fine down, on which they forsook both the other, and finished their work with this last article."\*

---

### THE STARLING.

FEW birds are more generally known than the Starling. It is an inhabitant of almost all climates, and is common in every part of England. It is a familiar bird, and easily trained. Its natural voice is strong and hoarse; but it may be taught to repeat sentences of some length, and to pipe tunes admirably.

As winter approaches, Starlings begin to collect; and as the cold season advances, they are seen to assemble in vast flocks in the morning and evening. They may be known at a distance by their whirling flight, forming circles as they approach. They make a chattering noise when they assemble and when they disperse. They are fond of society, and are sometimes seen in company with redwings, field-fares, and even with owls, jack-daws, and pigeons. They feed chiefly on snails, worms, and insects; they also eat various kinds of grain and seed, and are said to be very fond of cherries. In a

\* Architecture of Birds, 1831, p. 269.

state of confinement they will eat small pieces of raw meat, or bread soaked in water.

The female Starling builds a simple nest of straw and twigs, &c. in the hollows of trees, rocks, or old walls, sometimes in cliffs overhanging the sea, and frequently



in the hollows and chinks of an old church-tower, such as is represented in the above engraving. Starlings have been often known to make their nests in dove-cots, and to live in perfect harmony with the pigeons while rearing their young. The female lays five eggs, of the faintest blue colour ; and the nest is often placed so high that it is impossible for cruel boys to get at it to rob the poor bird of its young.

Bishop Stanley, who gives a very interesting account of a flock of these birds which came under his immediate observation, says, that a lame Starling was observed for eight years to return to the same nest.

---

## THE RAVEN.

THE Raven is the largest bird of the Crow kind. It is a native of every region, and can bear heat or cold alike. "Go where we will," says Bishop Stanley, "over the face of the wide world, and the well-known hoarse croak of the Raven is still to be heard." It generally builds its nest in a high tree, and lays five or six eggs. It is a bird of prey, feeding chiefly on small animals and carrion. Young rabbits, ducks, chickens, eggs, &c., are sometimes devoured by it. If tamed when young, the Raven becomes very familiar, and exhibits many amusing qualities, which make mirth for a whole neighbourhood. It is a forward, sly, prying, active creature. It may be instructed in the art of fowling, like the hawk, taught to fetch and carry like the spaniel, and even to speak like the parrot. The Raven is a sad thief, and is said to have been detected in the act of secreting silver spoons in its lurking-place. It has, however, several good qualities, which often make it deservedly a great favourite. We may glean a valuable lesson of kindness and compassion from the following anecdote of a Raven, that lived many years at the Red Lion Inn, Hungerford. The story is told in the Gentleman's Magazine, and quoted in Hancock's Essay on Instinct.

"Coming into the inn yard," says the narrator, "my chaise ran over and bruised the leg of my Newfoundland dog; and while we were examining the injury, Ralph, the raven, was evidently a concerned spectator; for the minute the dog was tied up, under the manger, with my horse, Ralph not only visited him, but brought him bones, and attended on him with particular and repeated marks of kindness. I observed it to the ostler, who told me that the bird had been brought up with a dog, and that the affection between them was mutual. Ralph's poor dog after a while broke his leg, and during the long time he was confined, Ralph waited on him constantly,

carried him his provisions, and scarcely ever left him alone. One night, by accident, the stable door had been shut, and Ralph had been deprived of the company of his friend the whole night; but the ostler found in the morning the door so pecked away, that had it not been opened, Ralph, in another hour, would have made his own entrance. Several other acts of kindness were shown by this bird to dogs in general, but particularly to maimed or wounded ones."

The Raven is the hardiest of the feathered tribe. Captain McClure, the Arctic voyager, states that in the depth of the Polar winter, when wine froze within a yard of the fire, the Ravens were seen flying about unconcernedly.



The Psalmist, proclaiming the wisdom and goodness of God, as evinced in the works of the creation, and in His providential care of the creatures of His hand, says: "He giveth to the beast his food, and to the young Ravens which cry."\* When God fed Elijah in a miraculous manner, Ravens brought the prophet meat morning and evening.† And the question in Job, "Who

\* Ps. cxlvii. 9.

† 1 Kings xvii. 6.

provideth for the Raven his food?"\* may be answered in the words of Psalm cxlv. 15, 16, "The eyes of all wait upon Thee, O Lord, and Thou givest them their meat in due season. Thou openest Thy hand, and fillest all things living with plenteousness."

---

### THE MAGPIE.

THE Magpie may be known from other birds of the Crow kind by the mixture of white and black on its breast and wings, by its long tail, and the bright and varied hue of its feathers. It is a loud, troublesome, and restless bird. It can be taught to imitate the human voice.

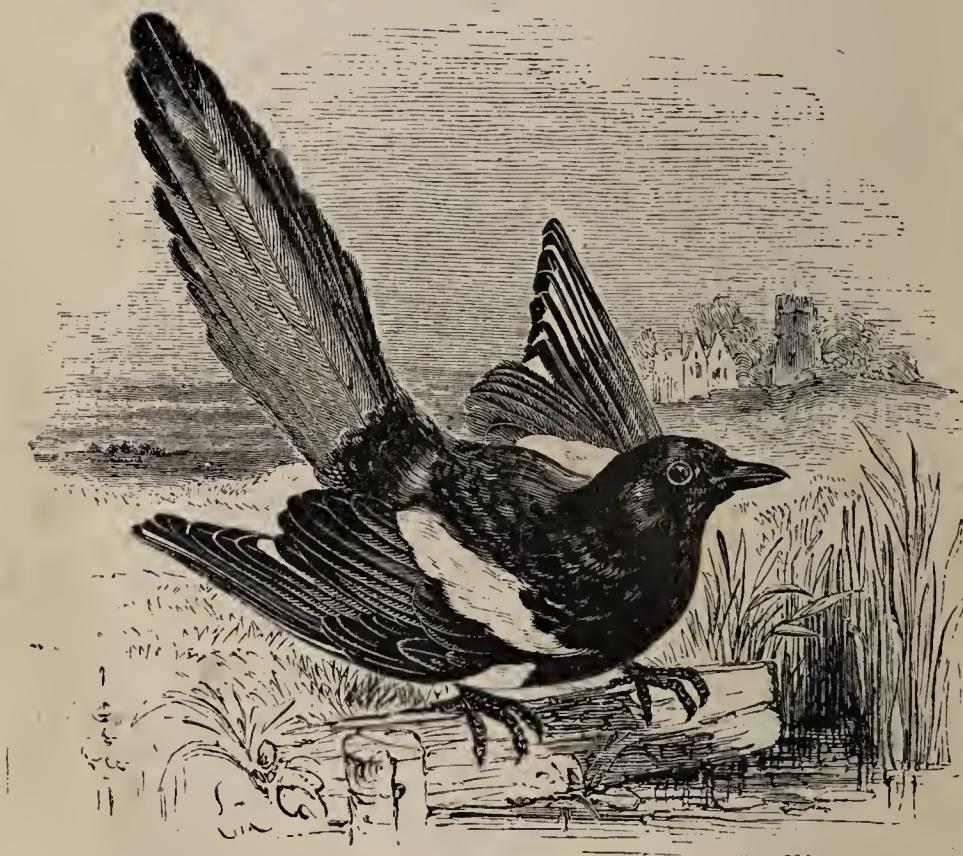
No food comes amiss to the Magpie. It lives on worms and larvæ, mice, reptiles, beetles, and even on small birds. It often perches on the back of a sheep, or an ox, picking out the insects that lodge there, and chattering all the time. It is given to stealing and hiding small articles of any kind : one has been known to hide its stolen goods among the thick wool of a sheep's back.

Its nest is generally very curious, on account of the manner in which the parent birds fence it round with briars and thorns, to keep off the foxes, cats, and hawks, which might else assail the young brood. Bishop Stanley, in his History of Birds, mentions some anecdotes of a pair of Magpies which had settled near a house in the north of Scotland. He says, "The female was observed to be the more active and thievish of the two, and withal very ungrateful ; for although the children about the house had often frightened cats and hawks from the spot, yet she one day seized a chicken, and carried it to the top of the house to eat it, when the hen immediately followed, and having rescued the

\* Job xxxviii. 41.

chicken, brought it safely down in her beak: and it was remarked, that the poor little bird, though it made a great noise while the Magpie was carrying it up, was quite quiet, and seemed to feel no pain, while its mother was carrying it down."

A more favourable trait appears in the following circumstance, which occurred in Essex. "Some boys



having taken four young ravens from a nest, placed them in a waggon in a cart-shed. About the same time these cruel boys destroyed the young of a Magpie, which had built its nest near the cart-shed; when the old Magpie, hearing the young ravens cry for food, brought some, and constantly fed them till they were given away by the boys."

## THE COMMON KING-FISHER.



THIS little bird, whose length is generally about seven inches, is a most expert fisher. It is very beautiful but very greedy. The quantity of fish it will eat at one meal is quite surprising. This species of King-fisher is common in most parts of Europe, and is remarkable for its brilliant plumage, which gleams like metal, with blue and green, and for the quickness of its flight. Bishop Stanley, in his "Familiar History of Birds," gives such a lively account of its appearance and habits, that we cannot forbear quoting it.

"Most of our readers," says he, "may probably have seen it darting in the direction of a brook-course, like a flying emerald. We were once fortunate enough to watch one within a few yards for some time. It was on a calm sunny day: the bird was observed to settle

on the post of a rail, projecting into a piece of water : a boat was gently impelled towards it in perfect silence : it seemed to take no notice, sitting motionless, as if it had been stuffed and placed there for ornament. In an instant it darted off with so rapid a motion, that a green bright line from the post to a splash of water, where it had plunged, alone marked its course. In another instant it rose, and with as rapid a flight resumed its position on the post, having swallowed the little fish, whose bright scales we could just see glistening in the sun as the bird emerged from the water. There it rested motionless as before, till another plunge denoted the capture of another fish ; and so on, till, after having captured four or five, it darted away, and was seen no more.”

The King-fisher lays five or six eggs, in a little burrow which it chooses in the bank of a river, forming the nest chiefly of fish-bones and scales, cast up by it in an undigested state. The eggs are of a pinky white. The young, as soon as they are hatched, utter cries for food. They live for some time on their parents' skill in the art of fishing, but are not long in learning to fish for themselves, and get their own livelihood. The classical name by which the King-fisher was known is Halcyon. There was among the ancients a poetical notion, that birds of this kind “kept the waters calm and serene while they built and sat on their nests on the surface of the sea.”\* Hence the phrase “Halcyon days,” which means *happy*, or *tranquil* days.

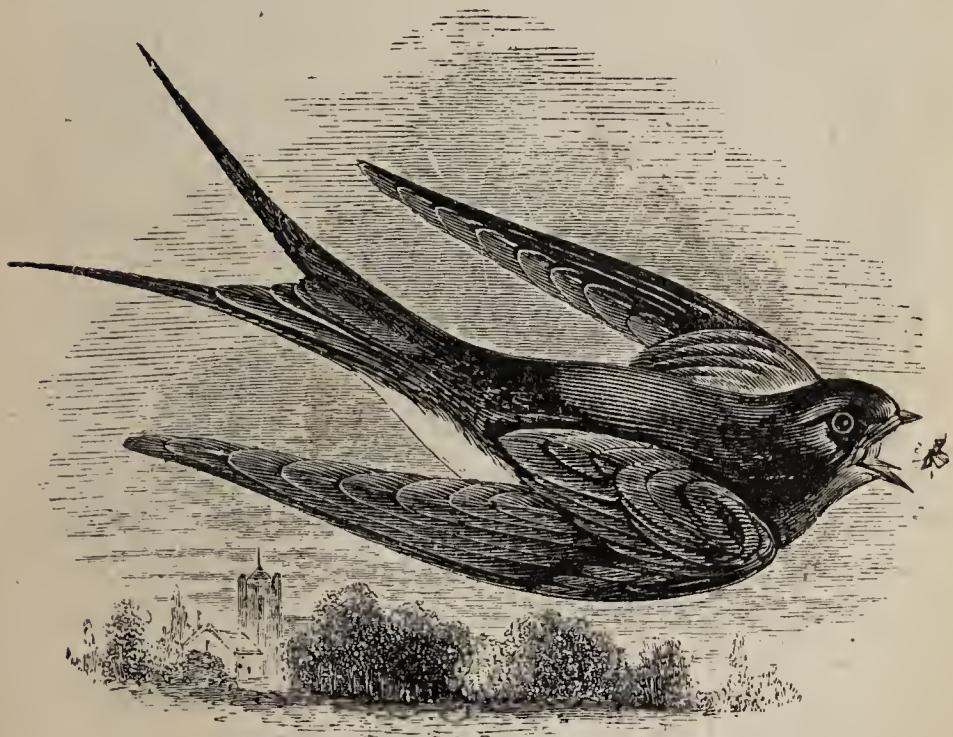
### THE SWALLOW.

“THE Swallow,” says Sir Humphry Davy, “is one of my favourite birds, and a rival of the nightingale ; for he glads my sense of seeing, as much as the other does my sense of hearing. He is the joyous harbinger

\* Lemprière's Classical Dictionary, “ALCYONE.”

of the best season ; he lives a life of enjoyment among the loveliest forms of nature. Winter is unknown to him ; and he leaves the green meadows of England in autumn, for the myrtle and orange-groves of Italy, and for the palms of Africa."

The first appearance of the Swallow is very early in April, and its departure is at the close of the summer. This bird being very rapid in its flight, and able to continue long upon the wing, migrates to a warmer climate as soon as the weather becomes too cold for it to remain in our own.



The quantity of insects devoured by Swallows is very large. Small spiders, floating about in the air, form a considerable article of food to the Swift, which is one of the Swallows. Bishop Stanley, in his History of Birds, says : " It is a common weather-rule, that when Swallows fly low there will be rain, but when high it will be fair. The reason may be easily guessed. They

feed entirely upon insects : and the flight of insects depends, in a great degree, on the state of the air. If it is clear and dry they rise ; if moist or likely to be so, they keep nearer the ground."

Gilbert White, in his History of Selborne, admirably describes the process by which, in the month of May, the Window-Swallow, or Martin, builds its nest. The crust or shell of this nest is formed of mud or loam, and is tempered and wrought together with little pieces of straw to make it tough and tenacious. Speaking of the gradual advance of the work, he says : "Thus careful workmen, when they build mud walls (informed at first, perhaps, by this little bird), raise but a moderate layer at a time, and then desist ; lest the work should become top-heavy, and so be ruined by its own weight."

Allusion is made in Holy Scripture to the Swallow, as observing "the time of its coming," \* and as finding "a nest for herself" in the sanctuary.†

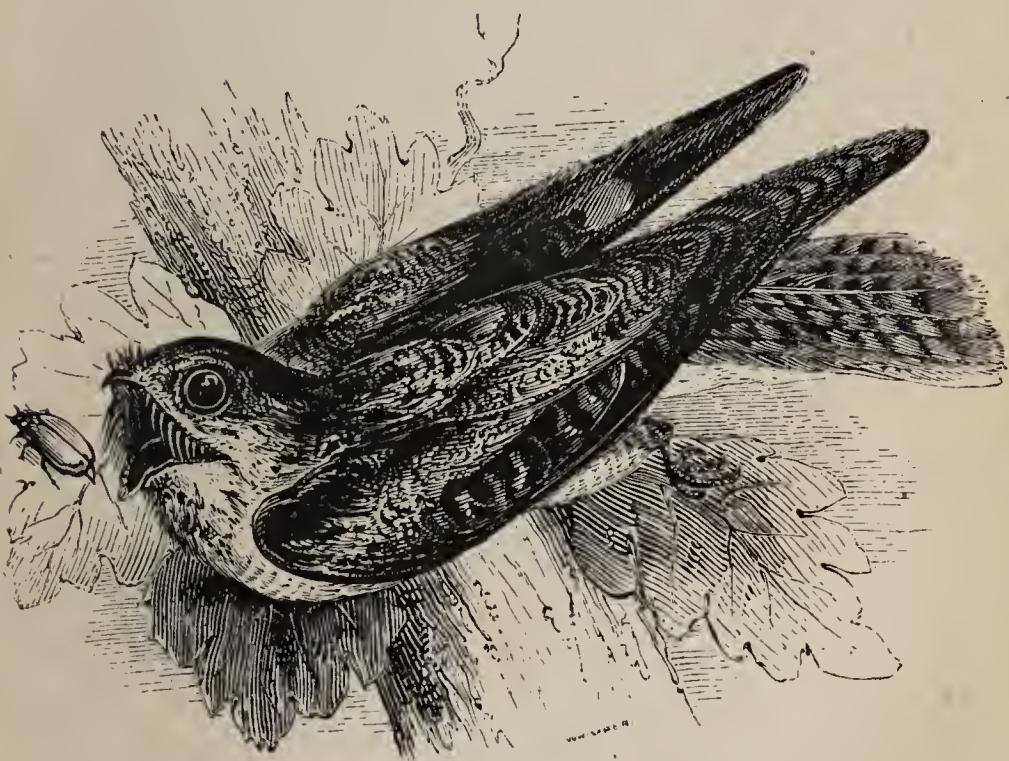
### THE NIGHT JAR.

MANY strange and absurd errors are still held by numbers of people, even in this day of light and knowledge ; and it is no easy matter to root out mistakes in Natural History. But it is a great pity that such errors should be kept up by means of names given to certain animals by writers on these subjects. For instance, the beautiful bird before us is most unjustly called in Latin, *caprimulgus*, and in the Greek, *Aigiotheles*, or *Goatsucker*. It is also called the Churn-owl, and is known by other titles. The above description gives a notion of the evil habit of which it has been unjustly accused,—that of sucking goats and draining their milk. Aristotle gravely charges the bird with this offence. France, Germany, and Italy formerly adopted the same notion ;

\* Jer. viii. 7.

† Psalm lxxxiv. 3.

whilst in England, where goats are more scarce, it has been said, with even less show of reason, that the cow is the victim, and not the goat. A practice like this would clearly be impossible on the part of a bird not above ten inches long. The word *Night Jar*, *Fern-owl*, is more sensible ; the former alluding to the jarring notes which it strikes up in the evening ; the latter, to its likeness in many respects to the owl. The *Night Jar* is a bird of passage, visiting the British Isles in May, and leaving about September, to pass the winter



generally in Africa. It is common in the United States of America. It feeds upon moths, beetles, and other large insects, which with the help of the bristles or moustaches with which its mouth is fringed, it catches as they fly. It is of important service in clearing the cultivated lands of cockchafers, which are among the most destructive of our larger insects. It does not build any regular nest, but lays its two eggs on the ground

under the cover of fern, heath, or some protecting shrub. They are marbled with white, yellowish brown, and grey. Gilbert White took particular notice of the Night Jar. One evening whilst he was drinking tea with some neighbours, in a little straw hermitage on the side of a steep hill, one of these birds settled on the cross of the edifice and began to chatter, and, says he, “We were all struck with wonder, to find that the organs of that little animal gave a sensible vibration to the whole building !” On another occasion he saw the rapid creature, in the act of flying, stretch out its short leg, and put something from its foot into its mouth. Inferring that it took part of its prey with its foot, he found, on examination, that its middle toe had a claw like a saw.

With what marvellous skill and care has our Almighty Father adapted the bodies and powers of His creatures to their several wants ! The earth and sky are full of His goodness, and show the proofs of His wonder-working Hand.

---

### BIRDS OF PARADISE.

THERE are several varieties of this very beautiful family (*Paradiseidæ*), whose abundant plumage and gorgeous colours have procured for them a world-wide fame, and given them such a degree of interest as to dazzle and mislead some great writers on Natural History. When first brought to Europe about 350 years since, these birds were beheld with admiration of a romantic kind. Such brilliant tints, such perfect forms, such graceful movements appeared supernatural. It was imagined that the birds never touched the earth ; that if they took any rest, their support was obtained by means of the light feathers of their tails. The lovely creature, it was said, had no feet ; his only element was the cloudless air, and his food the morning

dew. Thus he was gazed at with wonder and delight, approaching to awe :—

“ For he on honey-dew hath fed,  
And drank the milk of Paradise.”

Paradise-birds, never having reached this country alive, could not be well judged of ; and the ideas con-



cerning them, which may well be called vulgar errors, were soon corrected by facts ; not, however, until the term *Apoda*, or Footless, had been fixed upon some of the most splendid of the race. The names of the several sorts betoken the rich nature of their plumage. Words cannot be too strong for their descriptions. We have

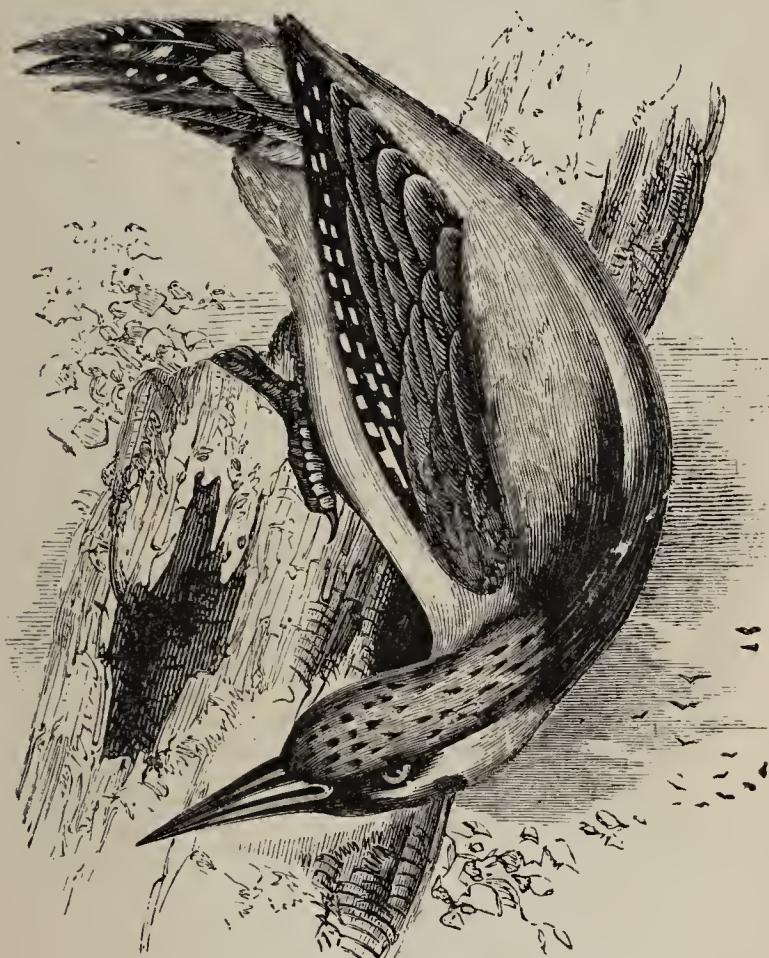
the "Incomparable," the "King" Bird of Paradise, the "Superb," the "Golden," the "Magnificent," and the "Emerald" Bird of Paradise. The Emerald is of the species *Apoda*; so called originally, because the natives of New Guinea, and a few neighbouring islands in the Indian seas, where these birds are found, used to cut off the legs very neatly before drying and selling the brilliantly feathered skins. The legs and feet are not handsome. The Emerald, when alive, is of the size of the common jay. Bennett, in his "Wanderings," gives an account of one of these birds, which he found in an aviary at Macao. This elegant creature had a light and playful manner, with an arch look; danced about when a visitor approached the cage, and seemed delighted at being made an object of admiration. It washed itself regularly twice a-day, and, after each ablution, threw its delicate feathers up nearly over its head. So proud was it of its charming dress, that it never permitted the least spot to remain upon it. Its food consisted of grasshoppers and other insects, which it caught alive in its beak; it was very fond of cockroaches; but it would not descend to the floor of the cage to take them, as if afraid of spoiling its bright clothing. Its notes were like the cawing of a raven. With all its rich apparel, the Bird of Paradise has no attraction of voice. What a contrast to the nightingale, with its plain and homely suit, but splendid tones!

---

### THE GREEN WOODPECKER.

THE *Picidae* (or Woodpeckers, &c.) are very numerous, and are found in different species, scattered over various parts of the world. They are, as the naturalists say, "essentially scansorial," that is, fitted for climbing; their feet being formed for the purpose of clinging to the bark of trees, in which they meet with their chief sup-

plies of food. This food consists of insects found in the crevices and under the bark of unsound trees. The Woodpecker is, however, also fond of fruit, as the gardener too often finds to his sorrow ; showing a partiality for nuts, which it has no difficulty in cracking by strokes



from its bill. The above is a common specimen of the British Woodpecker. It lives in forests and wooded districts. Often is its loud cry heard, it being itself unseen. This cry, when frequently uttered, is said to foretell rainy weather. Hence one of the names by which the bird is known among country people, the Rain-bird. It is also called, from its habits, the Hew-hole ; Popinjay is another of its names. The Green Woodpecker, like the members of its family in general,

mounts a tree with great speed, and begins its work of hollowing out the decaying wood with its strong sharp wedge-like beak ; repeating the blows so quickly that the head appears in constant motion during the task. The hollow sound from the tree whilst the "tapping" goes on, is sometimes heard at a distance from the spot. This bird resembles the Golden-winged Wood-pecker of America in its habit of descending (which it does backward) from the tree, to seek for food on the ground. It is glad to find ants, which it picks up very easily with its long tongue. The nest of the Woodpecker is the soft decaying wood in the hollow of a tree. It lays five eggs, which are of a bluish-white. Wilson, a careful observer and an agreeable writer on Natural History, says a kind word for the little *Downy Woodpecker* ; namely, that no bird rids the apple-trees of so many vermin as this. "In more than fifty orchards which I examined myself," says Mr. Wilson, "those trees which were marked by the Woodpecker were the most thriving, and seemingly the most productive."

---

## HUMMING BIRDS.

THESE brilliant little birds, which have been elegantly styled "Winged gems," are all natives of America. They almost always seem to be on the wing : but the amazing swiftness of flight for which they are remarkable, and to which their long and narrow wings are admirably adapted, renders it difficult to obtain a good view of these tiny wonders of creation. In their mode of flying they have been compared with the sphinx-moths and the dragon-flies. They feed upon small insects, and the sweets gathered from flowers ; and when hovering before a flower, or buzzing round it, their wings vibrate so rapidly as to be scarcely visible. Meanwhile, they produce a murmur or hum, from which the

English name is derived. There are various species, all of bright and dazzling plumage, such as the *Ruby-throated*, *Double-crested*, *Sickle-winged*, *Bar-tailed* Humming Bird, &c. The species which are known and described exceed three hundred in number. These minute birds have legs remarkably weak, and wings as



remarkably strong, from which it is inferred that they are intended to pass most of their time on the wing. They seldom perch, even when feeding; but suspend themselves in the air, while with their long tongues they extract the nectar from the flowers.

The late Captain Lyon, R.N., gave, in the Zoological

Journal, Vol. v., an account of some young Humming Birds, in Brazil, whose hatching and education, in 1829, he carefully watched. "The nest," he said, "was made in a little orange-bush, by the side of a frequented walk in my garden. It was composed of the silky down of a plant, and covered with small flat pieces of yellow lichen. The first egg was laid January 26th, the second on the 28th; and two little creatures like bees made their appearance on the morning of February 14. As the young increased in size, the mother built her nest higher. She sat very close to her charge during a continuance of the heavy rains for several days and nights. The young remained blind till February 28th. They flew on the morning of March 7th, without previous practice, as strongly and swiftly as the mother, taking their first dart from the nest to a tree about twenty yards distant."

Two very small white eggs, rather elongated, are generally laid by the Humming Bird. The nest is an exceedingly neat and compact structure.

---

### THE CUCKOO.

Most of our readers have heard the note of this bird, which has been called the Herald of Spring, and upon which many beautiful verses have been written. But of those who have listened with pleasure to its musical voice, few have seen the bird itself, which often alights on the higher boughs of the trees, and climbs quickly along the thick branches, eating the insects which it finds in its way. In these journeys it does not use its wings; these being very short. The bird, however, sometimes feeds when upon the wing. Gilbert White noticed several Cuckoos skimming over a pond, and busily feeding upon dragon-flies. But their great favourite is the hairy caterpillar. This bird arrives in our country early

in the spring. In White's "Naturalist's Calendar," it is marked as being first heard April 7th. By the end of June, or the beginning of July, it takes its departure to a cooler climate. The well-known notes of the Cuckoo, which are chiefly agreeable on account of the happy season of the year in which they are listened to, are the notes of the male bird: the female making only



a chattering noise. The strange habit of the Cuckoo, of placing its eggs in the nests of other birds, must be noticed here. The nests usually chosen are those of the hedge-sparrow, titlark, wagtail, &c. The Cuckoo's egg is very small compared with the size of the bird. When the young Cuckoo is hatched and has gained a little strength, it creeps under its weaker companions, and with a sort of jerk and push sends them overboard.

Thus it obtains for itself all the care and attention of the old birds, its foster-parents. Sometimes two Cuckoo's eggs are laid in the same nest, and when they are hatched there is a struggle for the sole possession of the home, until the stronger succeeds in pitching out the weaker. White found in the nest of a titlark a saucy young Cuckoo, and tried its temper, teasing it with his finger. The little bird angrily followed his finger many feet from the nest, sparring and beating with its wings like a game-cock.

---

### THE COMMON GREY PARROT.

THE species of the Parrot kind are very numerous, being widely spread over Asia, Africa, America, and Australia. They are great climbers, and great talkers. Several of their species were well known to the ancients, and are alluded to by the Greek and Latin writers, especially for the art which these birds possess of imitating the human voice.

The beauty of the scenery in those warm countries in which they abound is much increased by the rich varied plumage, and lively movements, of the several birds of this family, to which belong the Macaw, the Cockatoo, and the Parroquet. They live chiefly on fruit and seeds ; though, when kept in a cage, they will occasionally eat both flesh and fish. The Parrot has four toes, two before and two behind, with which it climbs, and which answer the purpose of hands for holding its food, and carrying it to its mouth, in the same manner as squirrels and monkeys use their front paws. There is another habit common to Parrots : in climbing or creeping they fasten by the bill, the upper division of which is moveable, and use their feet only as secondary aids.

The whole of the Parrot tribe can be domesticated with very little trouble, and they show considerable

attachment to those who are kind to them ; when much petted, however, they are apt to grow jealous of other favourites, and to resent attentions shown towards them.

The bird represented in the engraving is well known for its amusing ways in imitating the human voice. It listens with attention, and strives to repeat words ; it



dwells constantly on some syllables, which it has heard, and seems to set itself tasks, endeavouring each day to recollect its lesson. The accuracy with which Parrots, after careful training, are known to utter long sentences, is surprising. Some curious instances of this are related in Bingley's *Animal Biography*, and in other

books. He gives a particular description of one which had been bought by a gentleman at Bristol for one hundred guineas, and for which the purchaser was offered five hundred guineas a year, for the purpose of exhibition. It was a great talker, could whistle a variety of tunes, and beat time with all the exactness of a scientific musician. Its death was announced in the General Evening Post for October 9, 1802.

Dr. Goldsmith tells a story of King Henry the Seventh's Parrot, which fell out of the window of a room in the palace at Westminster, into the Thames, and at once called aloud, as it had heard people do, "A boat! twenty pounds for a boat!" A waterman passing, took it up, and saved the poor bird's life; and, on a question arising as to the amount to be paid to the man as a reward for restoring the Parrot, it was appealed to, when it instantly screamed out, "Give the knave a groat!" Locke, in his Essay on the Human Understanding, relates a still more extraordinary anecdote, which is quoted by Bingley, of a conversation held with a Parrot in the Brazilian language.

---

### THE ALEXANDRINE PARRAKEET.

INDIA is the native country of this species of the large family of Parrots. It is called Alexandrine from Alexander the Great, whose conquests were spread over India, and who returned from that country, laden with the spoils of the East, and bringing, as it is thought, among his treasures specimens of that Parrakeet which now bears his name. The bird is still occasionally found in the Peninsula of India, but more commonly in the Island of Ceylon. The species is somewhat rare, and affords a good instance of the form and habits of

Parrots in general. They are great climbers. Hence the feet are peculiarly fitted for grasping branch after branch of tall trees ; in mounting or descending which



they are greatly assisted by their bills. On these branches they find the chief articles of their food, fruit, including small nuts and berries, being liked by

them better than anything else. In eating they often carry their food to their mouths by means of their feet, which thus serve the purpose of hands. Collected in large numbers, they chatter together, and are very noisy and mischievous ; indeed, the farmers in the countries where these birds abound, look upon them with fear and dislike, in consequence of the havoc committed by them on the vegetation and fruits. In most of these things they remind us of the monkey, whose natural dwelling is for the most part in the same climate as that of this amusing bird.

The body of the Parrakeet is of a brilliant green, the bill of a bright ruby, and the neck half encircled by a rose-coloured collar. The usual length of the male is from eighteen to twenty inches ; the female is smaller ; the colours of both male and female are much the same.

---

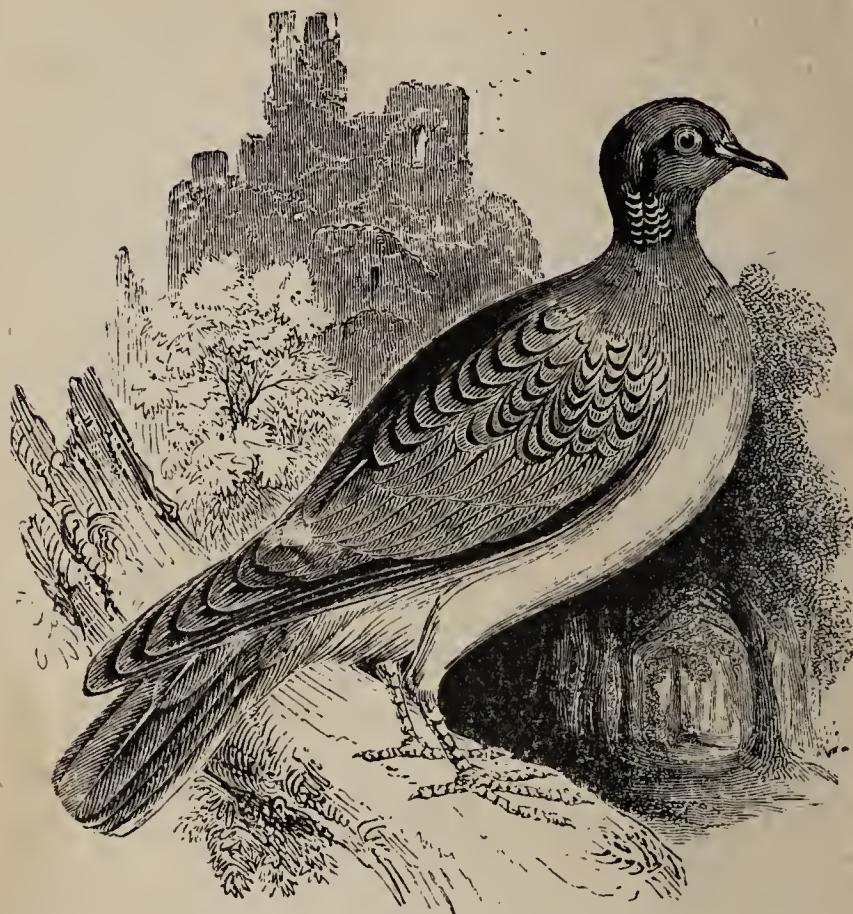
### THE BLUE AND YELLOW MACAW.

THE Macaws are natives of South America, and are among the largest of the Parrot tribe. They are easily tamed ; and if kindness is shown towards them, they become gentle and familiar. But in their power of imitation they fall very far short of the parrots and parrakeets. Their natural cries are harsh, discordant, and piercing ; and the few words which they are sometimes taught to utter are pronounced in a disagreeable tone. The beak is of enormous size and strength, and a bite from the bird is often very severe. The plumage is rich and varied. The Blue and Yellow Macaw is a native of Brazil, Guiana, and Surinam. The food consists chiefly of a kind of palm, which is plentiful in the swampy places in which these birds are found. They

generally choose the tops of high trees for their roosting-place. The Macaw lays two white eggs in the hollow of a decayed tree. The male bird assists in the duty of hatching the young, and in the labour of rearing them.



## THE TURTLE-DOVE.



THE Turtle-Dove is one of the smaller species of the pleasing family, to which belong all the different varieties of the common pigeon, the carrier-pigeon, and many others. Its note is tender and plaintive. It is very kind and constant to its mate, and has often been adduced as an emblem of domestic affection. It builds its nest with a few dry sticks in the boughs.

The Dove is spoken of in many parts of the Bible. Noah sent a dove out of the ark, to ascertain whether the waters of the flood had abated.\* The Dove was accounted clean by the law of Moses, and was ap-

\* Gen. viii. 8, 9.

pointed, on certain occasions, as an offering to the Lord. Thus, we read of “a pair of Turtle-doves, or two young pigeons.”\* It formed one of the articles of merchandise which were improperly allowed to be sold in the Temple at Jerusalem ; the traffic in them within the courts of the house of God having called forth the holy indignation of His blessed Son.†

The Psalmist says of those who are restored by God’s mercy to goodness and happiness, that “they shall be as the wings of a Dove covered with silver, and her feathers with yellow gold ;” and in his troubles he said, “Oh that I had wings like a Dove ! for then would I flee away and be at rest.”‡ The Jews, when lamenting the calamities they were suffering for their sins, are represented by Isaiah, as mourning “sore like Doves.”

In the above three passages the inspired writers have used similitudes taken from the beauty of plumage, the rapidity of flight, and the plaintiveness of voice peculiar to these birds. And as to the gentleness of their disposition, Christ, in giving His disciples rules of conduct, when in the midst of their enemies, said, “Be ye therefore as wise as serpents, and harmless as Doves ;”§ that is, Behave with the prudence and watchfulness of serpents, but cultivate at the same time the innocence and simplicity of the Dove.

## THE TURKEY.

THIS bird is of the order called *Gallinæ*, or Poultry, which is the most useful and valuable kind of birds ; the Peacock, Pheasant, Common Hen, Guinea-hen, Moor-fowl, Partridge, Quail, and a few others, belong to this order.

The Turkey was not known in Europe till about three hundred years ago, when it was brought from

\* Luke ii. 24.

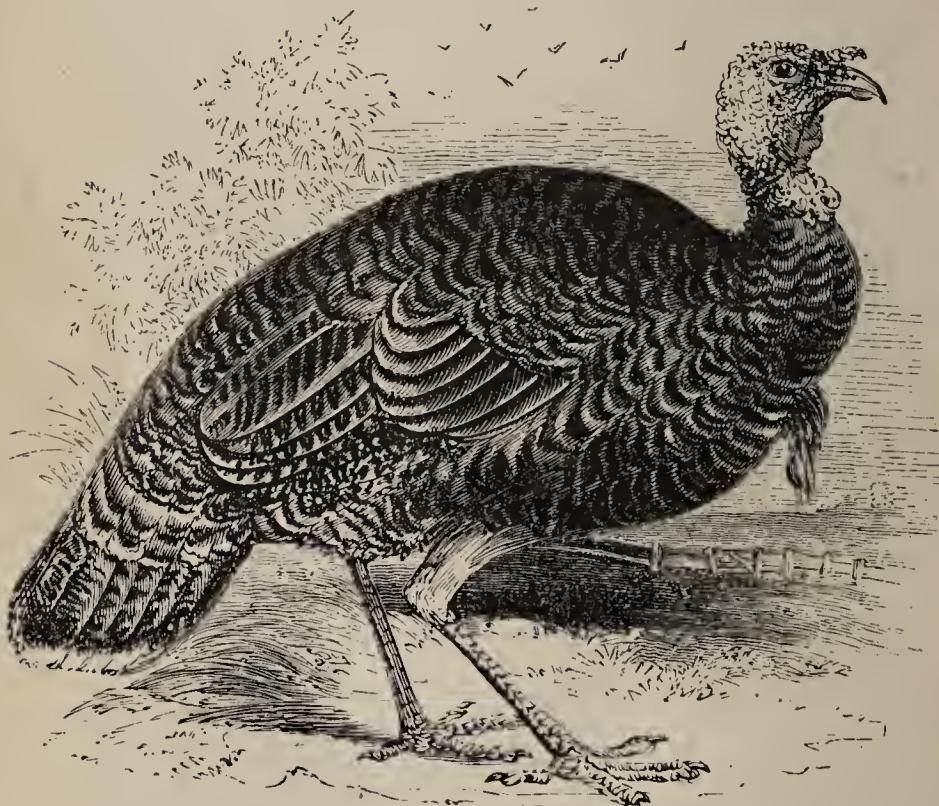
† Matt. xxi. 12.

‡ Psalm lv. 6.

§ Matt. x. 16.

America to France. It was imported into England in the reign of Henry the Eighth, and soon became a favourite article of food, especially at the Christmas season. Turkeys are reared in great numbers in Norfolk, Suffolk, Devonshire, and some other counties, whence they are sent to the London markets.

In their wild state, in North America, Turkeys herd together in large flocks, but they are every year becoming more scarce, having been driven from their former haunts by those who have taken possession of



the land. Severe discipline is exercised in these flocks by the old birds, particularly the males, which seem to govern their young with great authority. "The young males," says Bishop Stanley, "are called gobblers, and are compelled to live by themselves; for if they venture to approach their seniors, they are sure of being severely

punished : many are killed on the spot by repeated blows on the skull."

The hunting of birds of this species is a frequent diversion of the natives of Canada. When they have discovered a number collected together, they send a well-trained dog into the midst of them. The birds no sooner perceive their enemy, than they make off at full speed, and with such swiftness, as to leave the dog behind. He however follows, and at last forces them to take shelter in a tree, where they sit exhausted, and incapable of further exertion, till the hunters knock them down with long poles.

The food of wild Turkeys consists chiefly of acorns, berries, and insects.

The male bird is proverbially of an angry and excitable disposition. The female is generally more mild and gentle ; she is often seen with a large family around her ; but, though so large and powerful a creature, she gives them very little protection against the attacks of any mischievous animal that comes in her way. She warns them to take care of themselves, but does not, like the common hen, willingly encounter danger for their sakes.

---

## THE PEACOCK.

THE Peacock is more ornamental than useful ; for though his flesh is of a good flavour, his form is so elegant, and his plumage so fine, that he is generally kept with great care in the grounds of his owners in the country, for the sake of his beauty ; and there he may often be seen walking with firm and slow steps along the gravel walks, or perched upon some parapet, or on the branch of a lofty tree, while he holds up his

head and spreads his richly-coloured train, as if waiting to be admired.

Though this bird is very beautiful to the sight, the cry which he frequently utters from some high branch, or from the roof of the house, is harsh and unpleasant.



Nor does he retain his lovely feathers all the year ; they are shed at certain times ; and the Peacock when deprived of them seems ashamed, and tries to hide himself, till the returning season restores his usual attire.

Spenser, in the Shepherd's Calendar, in his lines on this bird, shows the unprofitableness of mere outward beauty, when it is unaccompanied by better qualities:—

“ So praysen babes the peacock’s spotted traine,  
And wondren at bright Argus’ blazing eye ;  
But who regards him e'er the more forthy?  
Or feedes him once the fuller by a graine ?”

Like other birds of the Poultry kind, the Peacock feeds on corn ; his favourite food is barley ; though he does not refuse to eat insects or tender plants ; nor, when hungry, is he at all particular in his diet.

Peacocks are found wild in Asia ; the largest and finest are met with in India. They are mentioned in Holy Scripture as forming part of the cargoes of the fleet which carried treasures to the court of King Solomon : “ Once in three years came the navy of Tharshish, bringing gold, and silver, ivory, and apes, and Peacocks,” 1 Kings x. 22 ; 2 Chron. ix. 21. Their plumage is also alluded to in the book of Job : “ Gavest thou the goodly wings unto the Peacocks ?” Job xxxix. 13.

### THE COMMON PHEASANT.

THE Pheasant derives its name from Phasis, a river rising in the mountains of Armenia, from the banks of which this beautiful bird is said to have been brought into Greece by the Argonauts about 1260 before the Christian era. It has long been naturalized in this country, and great pains are taken in preserving them and maintaining the breed. It is also found in Tartary, and some parts of China. Its food is of various kinds ; Jerusalem artichokes, potatoes, buckwheat, peas, beans, barley, and wheat, as well as bulbous roots (as those of the tulip, the buttercup, &c.), for which it digs with its bill and feet. To this list must be added wild berries, sloes, haws, and insects of different sorts.

The most splendid specimens of the Pheasant with-

which we are acquainted have been brought from the north of China. Among these may be mentioned *Reeves's Pheasant*, so called from John Reeves, Esq. who brought one from that country: the *Golden Pheasant*, whose rich and varied plumage is chiefly distinguished by a fine glowing yellow: the *Silver Pheasant*, a larger bird than the former, and as beautiful, though less gorgeous in its colours. These become tame in confinement,



ment, and may be seen moving about in their enclosures in Collections, with the ease and confidence of barn-door fowls. There are also the *Long-tailed Pheasant*; and the superb *Argus*, so called from its dark ringed eye-spots, in which it somewhat resembles the Peacock.

Pheasants show considerable cunning; when alarmed they do not rise on the wing, but slip away under cover and run with astonishing speed to some place of safety.

The male is very courageous, and in fighting with a barn-door cock will often prove the conqueror.

The female Pheasant (as in the Gallinaceous tribe generally) is smaller than the male, and, from its dusky plumage, has a more sombre and homely appearance.

## THE COCK.

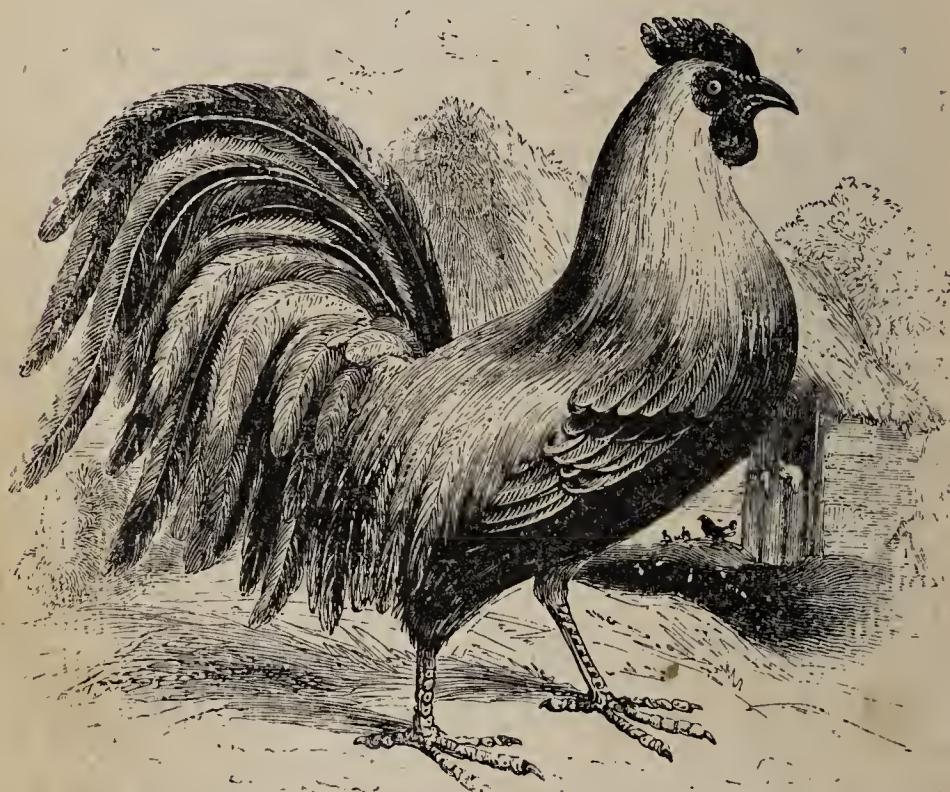
THIS beautiful bird is generally supposed to have been first brought from Persia. It is now sometimes met with in a wild state in the forests of India, and in some of the oriental islands. Like most of the Poultry tribe, the bird before us is bold and resolute. "We know an instance where a barn-door Cock became the terror of his little domain. Accustomed to be fed by his owner, he shortly began to express his disappointment, by very determined attacks, if his master happened to pass him without the accustomed offering. On one occasion he actually struck a piece out of a strong kerseymere garter, and repeated the assault in spite of some severe kicks which it was found necessary to inflict in self-defence. Nothing daunted, though occasionally kicked several yards, like a football, he would still come on as fiercely as ever for three or four times. During one of these assaults, he received an injury which lamed him for a week; but no sooner had he recovered than he became as pugnacious as ever."\*

Men have sometimes taken a shameful advantage of the temper and habits of these birds for the purposes of cruel sport. Happily for the cause of humanity, and the credit of this country, the savage diversion of cock-fighting, which once was very prevalent, is now but little practised, it being generally considered as cowardly as it is barbarous. The abominable custom of throwing at these birds on Shrove Tuesday was another

\* Stanley's History of Birds, vol. ii. chap. iv.

reproach to some classes of our countrymen. In denouncing these cruel sports, a writer, some years since, offered the following observations, which may still convey a valuable lesson to those who are guilty of any species of cruelty to animals :—

“Cowardice and cruelty generally go together ; whereas generosity and humanity are the proofs of a brave and



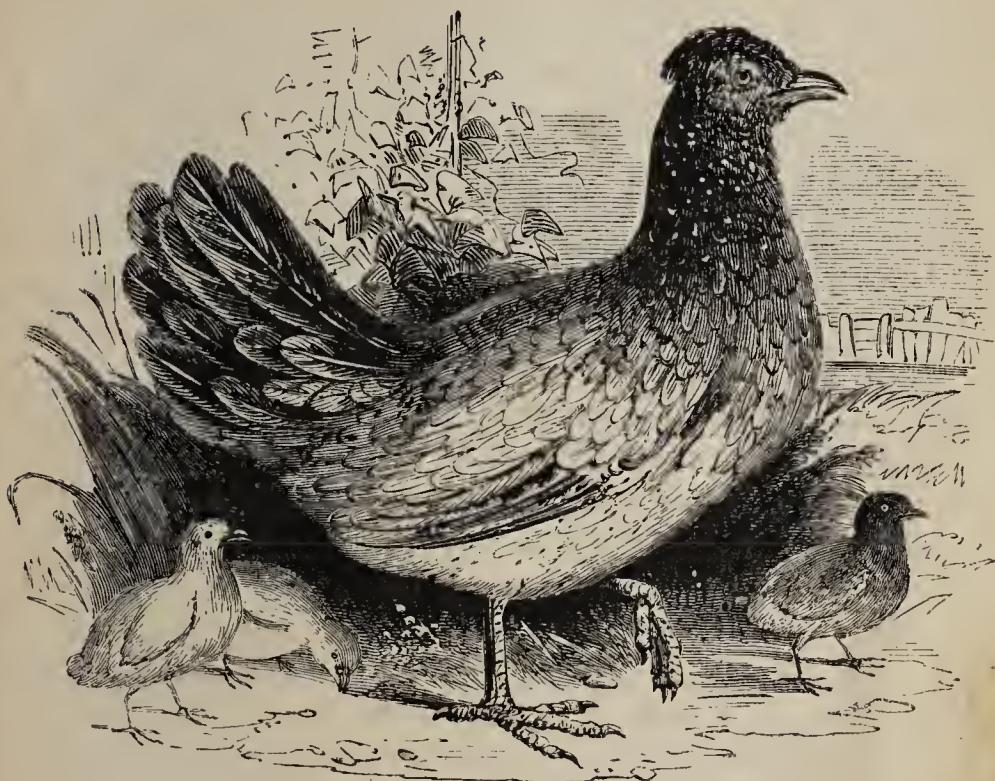
dauntless mind. It hath pleased God, of His great bounty, to give us all the creatures for our use and service, but we have not permission to abuse any of them ; *A righteous man, saith the Scripture, regardeth the life of his beast.*”\*

The Cock is mentioned in the New Testament, on the occasion of St. Peter’s third denial. The “Cock-crowing” was one of the four watches of the Jews.†

\* Prov. xii. 10.

† Mark xiii. 35.

## THE COMMON HEN.



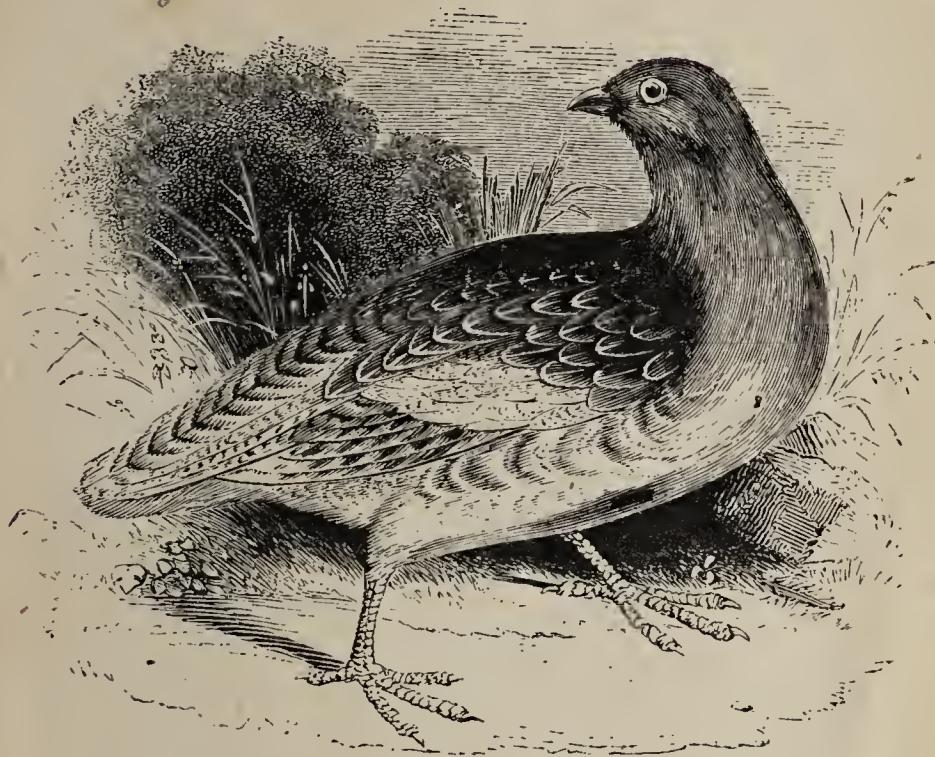
WE have observed that the order of birds which is called *Gallinaceous*, is the most useful species to man. When we consider them as affording us wholesome and agreeable food, or supplying feathers for the use of beds, and other purposes, the value of poultry must be acknowledged to be very great. The common fowl, which we constantly see in a tame state in our streets and farm-yards, is a native of India. Many species are known, and it is difficult to determine the direct original of the fowl with which we are so well acquainted. But it is, probably, a bird of Java.

The Hen makes her nest without any trouble, if left to herself. A hole scratched in the ground among a few bushes, is the chief preparation which she makes

for her eggs. While she sits, she carefully turns her eggs, and even removes them to different situations. When the chickens are hatched, she leads them forth to provide for themselves. Her maternal affection, as Gilbert White remarks in a fine passage of his work, seems to alter her very nature, arming her for the defence of her helpless brood on the slightest appearance of danger. The following interesting anecdote, told by Addison, of an instance of instinct in a Hen, will be acceptable to our readers :—“As I was walking this morning, I was wonderfully pleased to see the different workings of instinct in a Hen followed by a brood of ducks. The young upon the sight of a pond immediately ran into it ; while the step-mother, with all imaginable anxiety, hovered about the borders of it, to call them out of an element that appeared to her so dangerous and destructive. As the different principle which acted in these different animals cannot be termed reason, so when we call it instinct, we mean something we have no knowledge of. To me, as I hinted in my last paper, it seems the immediate direction of Providence, and such an operation of the Supreme Being, as that which determines all the portions of matter to their proper centres.”

Our Saviour alluded to the parental tenderness and care shown by this bird, when, in reproving the blindness of the Jews, and prophesying the destruction of Jerusalem, He said, “O Jerusalem, Jerusalem, thou that killest the prophets, and stonest them which are sent unto thee, how often would I have gathered thy children together, even as a Hen gathereth her chickens under her wings, and ye would not !”—Matt. xxiii. 37 ; Luke xiii. 34.

## THE PARTRIDGE.



LINNÆUS classed Partridges and Quails in the same family with the Grouse ; but modern writers on birds have noticed, in these, certain points of distinction, and give them the general description of *Perdicinae*.

In England, France, and other parts of Europe, there are beautiful varieties of this valuable bird. The red-legged Partridge is now completely naturalized in this country, being common in Norfolk and Suffolk. In America there are other sorts peculiar to that part of the globe.

The common Partridge, which we know so well, usually builds in corn-fields ; it sometimes, however, chooses a very different kind of nursery, as, for instance, a hay-stack. The eggs are frequently destroyed by weasels, stoats, crows, magpies, and other animals. The young are able to walk almost as soon as hatched, and usually leave the nest the same day. The mother leads

them out to feed, points out to them the proper places for their food, and assists them in finding it by scratching the ground with her feet. It happens that at the time when these little birds most require help, the several species of ants are to be easily met with ; and on these they satisfy their hunger, as well as on worms, slugs, and flies.

The Rev. G. White, in his account of Selborne, has some interesting remarks on the attention shown by the Partridge and other birds to their helpless brood :— “The more I reflect on the instinctive affection of animals for their young, the more am I astonished at its effects. This affection quickens the invention, and sharpens the sagacity of the brute creation. Thus a hen, just become a mother, is no longer the placid bird she used to be ; but, with feathers on end, wings hovering, and clucking note, she runs about like one possessed. Mothers will throw themselves in the way of the greatest danger to defend their young. A Partridge will tumble along before a sportsman, in order to draw away the dogs from her helpless covey. In the time of nest-building the most feeble birds will assault the most rapacious. All the swallows and martins of a village are up in arms at the sight of a hawk, whom they will persecute till he leaves the district.”

A brood of young Partridges is called a “covey ;” they continue to live together, and are fond of keeping to the same spot. This habit is often fatal to them, as the sportsman marks where they lie, and coming upon them while they feed, shoots them down in their hurried flight.

To “hunt the Partridge in the mountains,” is alluded to in Scripture, as customary in the time of Saul ; \* and in Franklin’s “Constantinople” is a curious account of the manner in which Partridges are taken in the present day by the Arabs of Mount Lebanon. This, however, is a different species from ours.

\* 1 Sam. xxvi. 20.

## THE BLACK GROUSE.



THERE are several sorts of the Tetrao, or Grouse. They have round or forked tails, and feathered legs. Above the eye is a patch of red skin. The male Black Grouse, seen in the above cut, is much larger than the female, and generally weighs about four pounds. The colour is deep black, with a white band across each wing. Under the tail the feathers are white. The colour of the female is brown, with a tinge of orange, barred and speckled with black, the feathers of the

breast being edged with white. The Black Grouse is a shy bird, and looked upon as a great prize by the sportsman. It is a native of the moorland and heath, the wild plain or mountain, the barren rock and thick pine-forest. Though most frequently found in Denmark, Sweden, Norway, Russia, Germany, and France, it is still met with in parts of the British Isles, especially in the Highlands of Scotland: it is not uncommon in Dorsetshire, Devonshire, and North Wales. Wherever there are wild heath and pine-woods, this fine bird finds a home. The shoots of heath and fir, various moorland berries, the buds of the birch and alder, and different kinds of grain, are the food of the Black Grouse. The young feed chiefly upon insects.

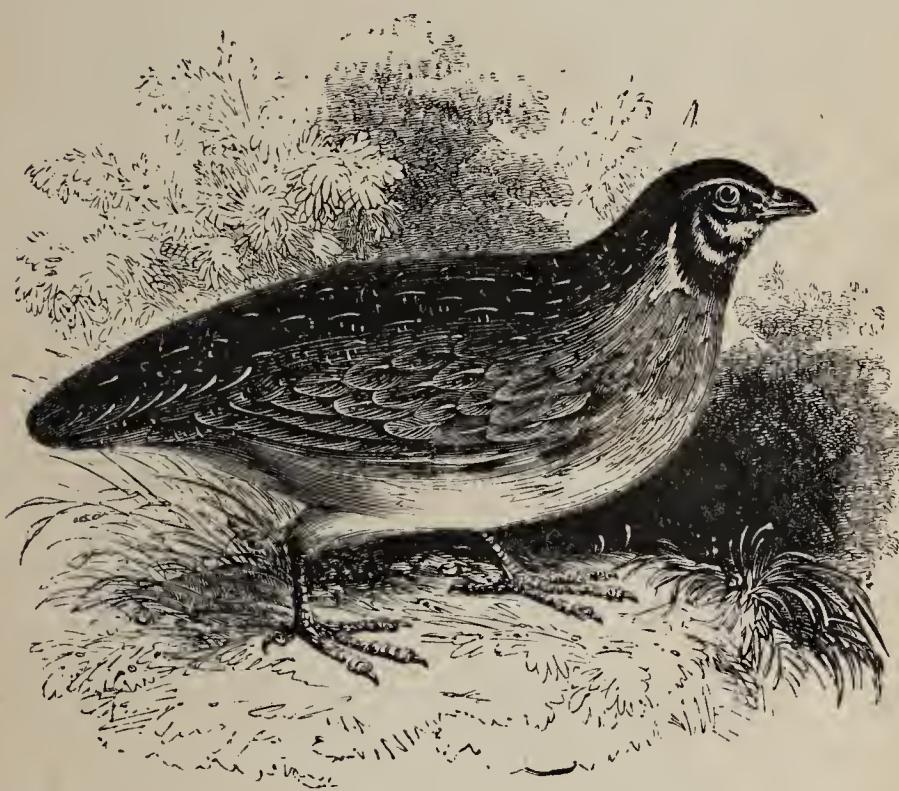
In the month of May, the female makes a nest under the shelter of furze or brushwood, and lays from six to ten eggs, of a yellowish grey hue spotted with light brown. The young birds, male and female, have at first the same dress—that of the mother; but in the autumn the young males take their own dark plumage of black, shot with deep blue.

---

### THE QUAIL.

THIS is the smallest British bird of the poultry tribe. It is well known in Europe, but migrates, on the approach of cold weather, to a warmer climate, proceeding to the African coast, and as far as Arabia and Persia, making its migrations by night. It is a courageous and quarrelsome bird. Taking advantage of these qualities, the Athenians of old diverted themselves with the exhibition of Quail-fighting; but they abstained from eating the flesh. We, on the contrary, esteem this bird a delicacy, but never encourage it to fight.

Modern travellers illustrate the account given in the Scriptures of the vast numbers of Quails, and the mode of drying them for food. “ And there went forth a wind from the Lord, and brought Quails from the sea, and let them fall by the camp, as it were a day’s journey on this side, and as it were a day’s journey on the



other side, round about the camp, and as it were two cubits high upon the face of the earth. And the people stood up all that day, and all that night, and all the next day, and they gathered the Quails ; he that gathered least, gathered ten homers ; and they spread them all abroad for themselves round about the camp.” \*

After referring to this passage, the reader will peruse with interest the following extract from Stade’s Travels

\* Numbers xi. 31, 32.

in Turkey :—“Near Constantinople, in the autumn, the sun is often obscured by the prodigious flights of Quails, which alight on the coasts of the Black Sea, near the Bosphorus, and are caught by means of nets spread on high poles, planted along the cliffs, some yards from its edge ; against which, the birds, exhausted by their passage over the sea, strike themselves and fall. In October, 1829, the Sultan sent orders to his admirals to catch four hundred dozen ; in three days they were collected, and brought to him alive, in small cages.”

The Egyptians take them at harvest-time by thousands in nets, and, having stripped off their feathers, dry them in the burning sand, after which they are sold at but one penny a pound. The object of the Israelites, therefore, in spreading them around the camp, appears to have been to dry them.

The Psalmist, in his exhortation to praise God for His providential care of the Israelites, by feeding them in the wilderness, says : “The people asked, and He brought Quails, and satisfied them with the bread of heaven.”\*

### THE OSTRICH.

THESE large birds are seen in flocks in the sandy deserts of Africa and Asia, and have sometimes been mistaken at a distance for cavalry. The Ostrich is different from birds in general in its manners and habits. Its wings are too small to raise it from the ground ; its neck is covered with hair ; its voice is a kind of mournful lowing : and it grazes on the plain with the zebra and other beasts.

Ostriches frequently do great injury to the farmers in the interior of Southern Africa, by entering their fields

\* Psalm cv. 40.

in flocks, and destroying the ears of wheat so completely, that in a large tract of land, it often happens that nothing but the bare straw is left behind.

The wings of the Ostrich are small, but are very useful in increasing its speed. When the wind blows in the direction which it is taking, it always flaps them.



The Arabians hunt it on horseback for its plumage ; they would not succeed in catching it if it ran in a straight course, so great is its speed ; but the Ostrich runs in curves, while the hunters take a direct line, and often shoot the bird as it dashes by them ; or they place some of their number in advance, who meet and kill it in its flight. When hunted with dogs and

driven to bay, the Ostrich will fight desperately, inflicting severe wounds with its claws.

Ostriches may be tamed ; and few creatures are then more useful than they. The feathers are very valuable : each bird has only a few on the wings and tail. The eggs are used for food and ornament ; the skins for leather ; the flesh is eaten ; it is white and coarse, and when in good condition is like a tough turkey. Ostriches are moreover sometimes employed as horses. During Dr. Adamson's residence at Podor, a French factory on the southern bank of the river Niger, he saw a large Ostrich so tame, that two little black children were placed both together on its back, and carried by it several times round the village. It afterwards carried two men with great speed.

The Ostrich is gentle towards persons to whom it is accustomed, but fierce to strangers. Its powers of digestion are wonderful. It will swallow, with voracity, rags, leather, wood, iron, or stone.

Three Ostrich feathers, with the legend *Ich Dien*, or *I serve*, form the crest of the Prince of Wales. The origin of this was as follows. The king of Bohemia, who fell at the battle of Cressy, A.D. 1346, had three Ostrich feathers in his crest, with the above motto. These were assumed by Edward, the Black Prince of Wales, and have been worn ever since by his successors, in memory of his triumph.

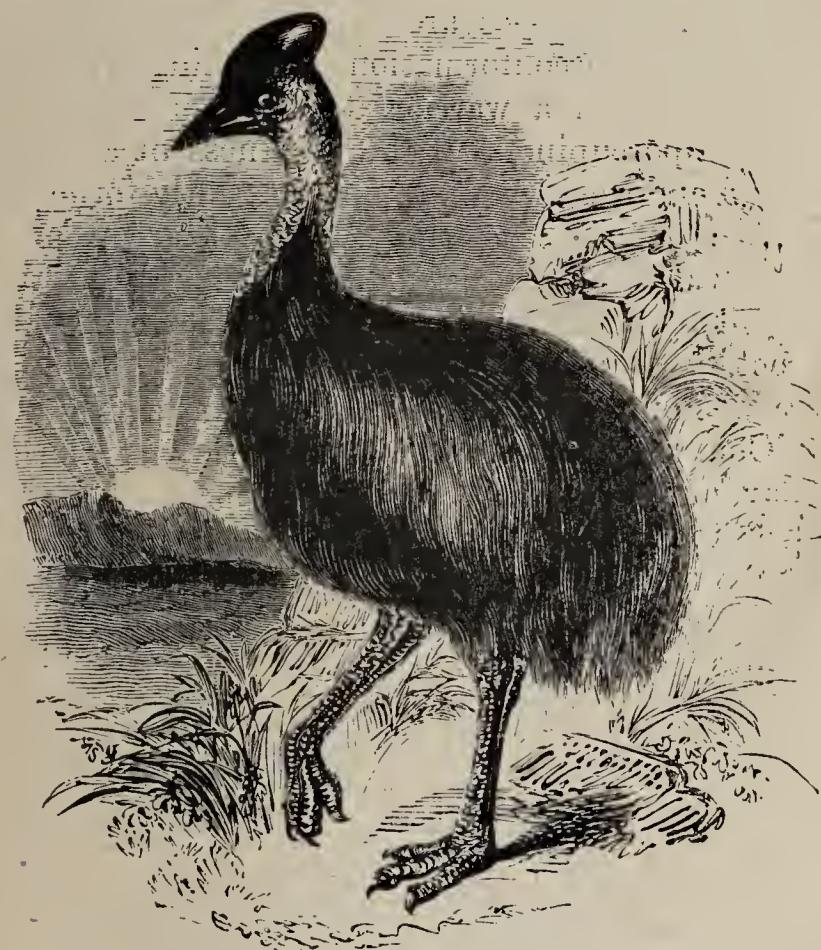
Reference is made in the Bible to the Ostrich.\*

### THE CASSOWARY.

THIS bird is in many respects like the ostrich ; the body is heavy, and the wings are so short that it cannot raise itself from the ground to fly. It will swallow almost anything which is offered to it, and

\* Job xxxix. 13—17. Lam. iv. 3.

which is not too large to pass down its throat. It is fond of fruit, vegetables, and eggs, and consumes large quantities of food. Cassowaries are found in the great islands of the Oriental Archipelago ; but as they bear the climate of Europe much better than most animals from hot countries, many of them have been brought



to this part of the world, but they have never bred here like the Emu.

Bishop Stanley says of the Cassowaries and Emus : "They are lively birds, and frisk and dance away when roused, when they look very like a woolly cushion on the top of two poles. Like the ostrich they are stupid, and like it also run with amazing swiftness, so much so that it is very difficult to run them down, unless

by the swiftest dogs, and by them only in an open country."

The following animated description of the Cassowary is given in Mavor's "Elements of Natural History":—

"The most remarkable part of the Cassowary is the head, which is armed with a kind of helmet of a horny substance, extremely hard, and capable of resisting a violent blow. The eyes are of a bright yellow, and in short the whole conformation is strikingly majestic. It has the head of a warrior, the eye of a lion, the defence of a porcupine, and the swiftness of a courser. Yet though endowed with powers apparently formidable for its own defence, it never attacks other birds, and when pursued, it either kicks like a horse, or overturns its assailant by running against him, and treading him under foot."

There was one some years since in the collection at Exeter 'Change. This bird was driven several times every day out of its cage by the keeper, in order to be shown to the visitors. It ran in an unconcerned manner about the room, allowed strangers to handle it, and, after showing itself off for a short time, marched quietly into its cage again.

---

### THE EMU.

THESE birds are widely spread over the southern part of New Holland, and the neighbouring islands. They are met with at Port Phillip and King George's Sound. Their food consists almost wholly of fruits, roots, and herbage; they are quite harmless, except when attacked. The length of the legs, and the powerful muscles in the thighs, enable this bird, like the ostrich, to run very swiftly: and as it is exceedingly shy, it is not easily overtaken or brought within gun-shot.

It is very like the ostrich in form and habits, but differs from it in some important respects. The feathers with which its body is covered have more the appearance of hair, or rather thin strips of whalebone: its wings are also much shorter, and, as well as the tail, are destitute of those beautiful feathers with which the ostrich is adorned.



The Emu is sometimes coursed for sport, being pursued by well-trained dogs, which run up abreast, and make a sudden spring at its neck. This, however, is a cruel amusement. We have no right to seek our

pleasure in a dumb creature's pain. Dogs, in general, are afraid of attacking the Emu, partly on account of the severe injuries which it is able to inflict by striking out with its feet.

Some parts of this bird are good for food. The eggs are large. Great quantities of them are eaten by the natives of Australia during the hatching season.

There are specimens of the Emu in the Gardens of the Zoological Society. The following account of the hatching of a brood of young birds of this species is extracted from Jesse's "Gleanings in Natural History":—

"The only instance I have met with in which the hen-bird has not the chief care in hatching and bringing up the young, is in the case of the Emus, at the farm of the Zoological Society, near Kingston. A pair of these birds have now five young ones : the female at different times laid five eggs in the pen in which she was confined. These were collected in one place by the male, who rolled them gently and carefully along with his beak. He then sat upon them himself, and continued to do so with the utmost assiduity for the space of nine weeks, during which time the female never took his place, nor was he ever observed to leave the nest. When the young were hatched, he alone took charge of them, and has continued to do so ever since."

---

### THE GREAT BUSTARD.

THIS is a British bird, and was once common in England, where it is now seldom seen, though it is sometimes met with in Norfolk and on Salisbury Plain, as well as other wide and open plains or commons. It is believed, and with good reason, that the old stock of this bird is extinct in this country, and that the occurrence of one of the species from time to time is only dependent upon an accidental visit.

The accompanying figure is that of the male bird, which is generally three times as large as the female, and is nearly four feet high. When full grown it weighs between twenty and thirty pounds ; and as its flesh is much valued as food, the capture of a Bustard is esteemed a great prize. We are told that it was formerly hunted by dogs. This seems strange ; as when once on



the wing, it can fly with amazing speed : and in the "Booke of Falconrie" (1611) it is mentioned as affording what was called "the great flight," together with the crane, wild goose, bittern, heron, &c. It, however, runs very swiftly, as the ostrich does, with the aid of its outspread wings.

The Bustard feeds on grain, grass, tender leaves, and sprouts of turnips, insects, worms, frogs, &c. It is a very shy and cautious bird, most difficult of approach in its wild state, and when in confinement, fierce and distrustful towards strangers.

The female lays two eggs of a pale brownish-olive, with splashes of light brown tinged with green. In the male, a tuft of long wiry feathers grows from the lower part of each cheek ; the fore part of the neck is without feathers. This fine bird is common on the plains of Greece, and in some parts of Russia, and is occasionally found in France.

---

### THE GOLDEN PLOVER.

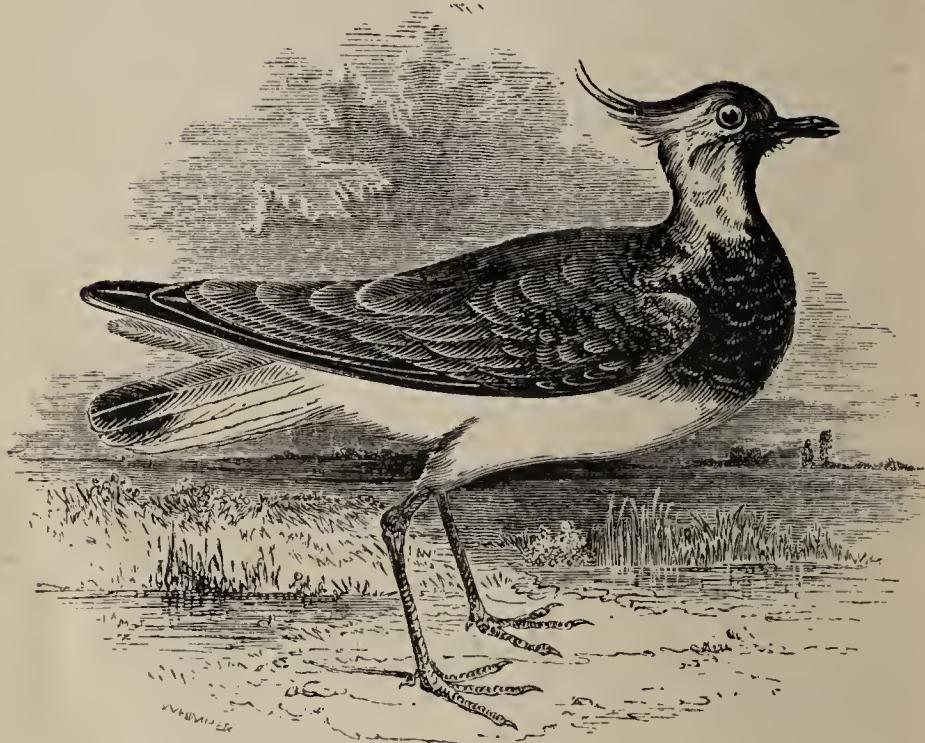
THIS is a bird of passage, and is met with in Europe, Western Asia, and parts of North Africa. Considerable numbers of the species called the Grey Plover were found to the south-west of Fury Point, by Captain Sir John Ross, in his expedition to the Polar Sea. The length of the Golden Plover is about ten inches and a half. On arriving in this country from colder regions, it lives on heaths and moors, and lays its eggs in a hollow in the ground. In a nest formed of a few small bents and stems of grass, four Plover's eggs may sometimes be found after a careful search. Great care is taken of the nest by the parent birds, especially the female. She will practise many clever arts to defend her little dwelling, and guard her helpless young ones against the approaches of the sportsman and the dog. While sitting she crouches so flat that her speckled back and wings are scarcely distinguishable from the soil. If she and her tiny charge are unexpectedly approached by the foot of man, in the spot where they lie, we are told that she will flutter along, as if lame and unable to take

wing, a little distance from the intruder : till having drawn off his attention from the young birds, and given him hopes of taking her, she will suddenly mount aloft, leaving him to gaze up in disappointment and surprise. The eggs which she lays are of a dull pale yellow, with a tinge of green, blotched and streaked with dark brown. They are generally boiled hard and eaten cold, and have a fine rich taste. The Plover, when cooked as a woodcock, is quite equal to that bird.



The summer plumage of this elegant bird differs greatly from its winter dress. As winter comes on, the black of the neck and under parts gradually fades ; the sides of the head, neck, and chest, become of an ashy brown ; the throat and under parts white.

## THE LAPWING.



THIS bird, which is about the size of a common pigeon, is found in most parts of Europe, as far northward as Iceland. In the winter it is met with in Persia and Egypt. Its food consists chiefly of worms, in search of which flocks of Lapwings may sometimes be seen, covering the low marshy grounds. When the bird meets with one of the little rolls of earth which are thrown out by the worm, it first gently removes the mould from the mouth of the hole; and then, having struck the ground at the side with its foot, patiently awaits the result. The worm, as if startled by the shaking of the earth near its habitation, issues from its retreat, and is instantly seized and devoured, or is carried to the younger birds. In the evening the Lap-

wing adopts another mode of obtaining its food. It then runs along the grass or mould, and feels with its feet for the worms which the dampness of the atmosphere has drawn from the earth.

These birds make a great noise with their wings in flying, and are sometimes called Peewits from their peculiar cry.

The female lays four eggs in a slight hollow of the ground, near some marsh, upon a little bed which she forms of dry grass. These eggs are olive-coloured and spotted with black, and are very large at one end and pointed at the other ; they are always arranged in the nest with their small ends inwards.

The Lapwing displays remarkable attachment to her young. We are told that she does not wait the arrival of her enemies at the nest, but boldly pushes out to meet them. When she has approached them as near as she dare venture, she rises from the ground, as if just startled from hatching, though, probably, she is a hundred yards from the nest. To complete the deception, she becomes more clamorous as she retires from the nest. If very near it, she appears altogether unconcerned, and her cries cease in proportion as her fears increase. When approached by dogs, she flies heavily at a little distance before them, as if wounded, but never moves towards the spot where her young ones are housed. The dogs pursue, in expectation every moment of seizing her, and by these means they miss her offspring ; for the ingenious and affectionate parent, having drawn off her pursuers to a proper distance, exerts her power of flight, and leaves them to stare with astonishment at her escape. The Lapwing is sometimes tamed, and then becomes familiar and confiding.

## THE COMMON HERON.



BIRDS of this species are most common in England, France, and Holland. They are birds of passage, and are found in Russia and Poland; and not only in Europe, but in other parts of the world.

The common Heron is upwards of three feet in length; and its wings expanded measure about five feet. It does not, however, weigh more than three pounds and a half; and it can therefore mount very high in the air. In winter, when its food is scarce, the bird becomes so thin that it seems to be little else than feathers and bones.

It feeds indiscriminately on all kinds of fish, as well in the sea as in rivers. In seeking its prey, it wades

gently into the water, and stands in it up to its knees, or resting on one foot, quietly watching the approach of fish, which it generally swallows whole. The time of fishing is chiefly before sunrise or after sunset. Herons are sometimes shot when they are in the act of fishing. Another mode of taking them is to place a fish on a hook at the end of a line, in places which they are known to frequent: the bird is hooked on its seizing the fish. When falconry was in fashion, flying the hawk at the Heron was a very frequent sport.

Herons build their nests on lofty trees, and more especially oaks, near to streams and marshes. The nest is large, formed of twigs, dry herbs, and reeds, the inside being lined with feathers and wool. The eggs, three or four in number, are about the size of those of the common hen, but longer, and of a greenish brown colour.

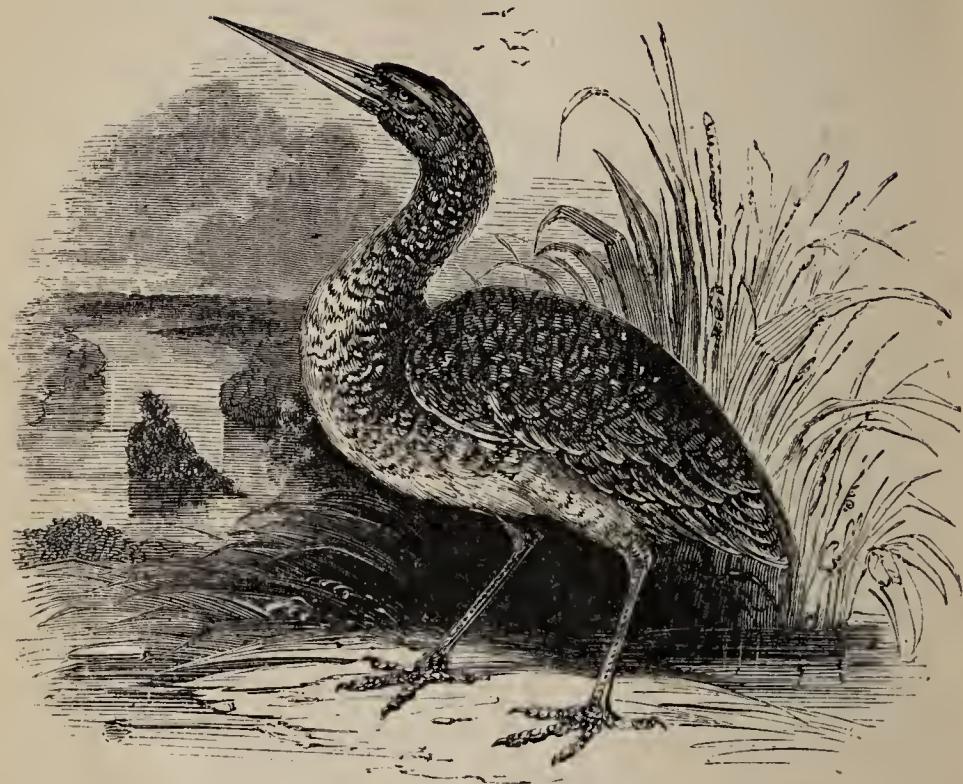
The male bird flies abroad in search of food, while the female attends to her young brood nearer home. But both parents assist in providing their young with food, and carry them plenty of fish to eat, until they are able to fly. As soon as the young ones can obtain their own living, they are driven from the nest, and are obliged to provide for themselves.

By instances such as these, young persons may be reminded of the obligation they are under "to learn and labour truly to get their own living," and by honest industry to relieve their relations as soon as possible of the burden of supporting them.

The ancient Jews counted this bird unclean, it being enumerated among the creatures which might not be eaten.\*

\* Lev. xi. 19.

## THE BITTERN.



THE Bittern is a timid solitary bird, concealing itself in the sedge and among reeds and bulrushes during the day, and is known by its dismal hollow note, which is heard particularly in the evening. The deep and bellowing tones which it utters have obtained for it in some places the name of the Bull-of-the-bog, and the Mire-drum ; while a writer on Natural History says of its peculiar sound, that it " might be supposed to proceed from some formidable animal, resident at the bottom of deep waters. The bird, however, that utters this terrific noise, which may be heard at the distance of a mile, is not so large as the heron." Strange notions have prevailed respecting the manner in which the note of the Bittern is produced ; some have fancied that it

thrusts its bill into the water or mud, and blowing with all its might, swells its note above the natural pitch. Thomson has fallen into this error, or rather, perhaps, taken a poet's licence to adopt a vulgar error as his own opinion, in order to illustrate his subject.

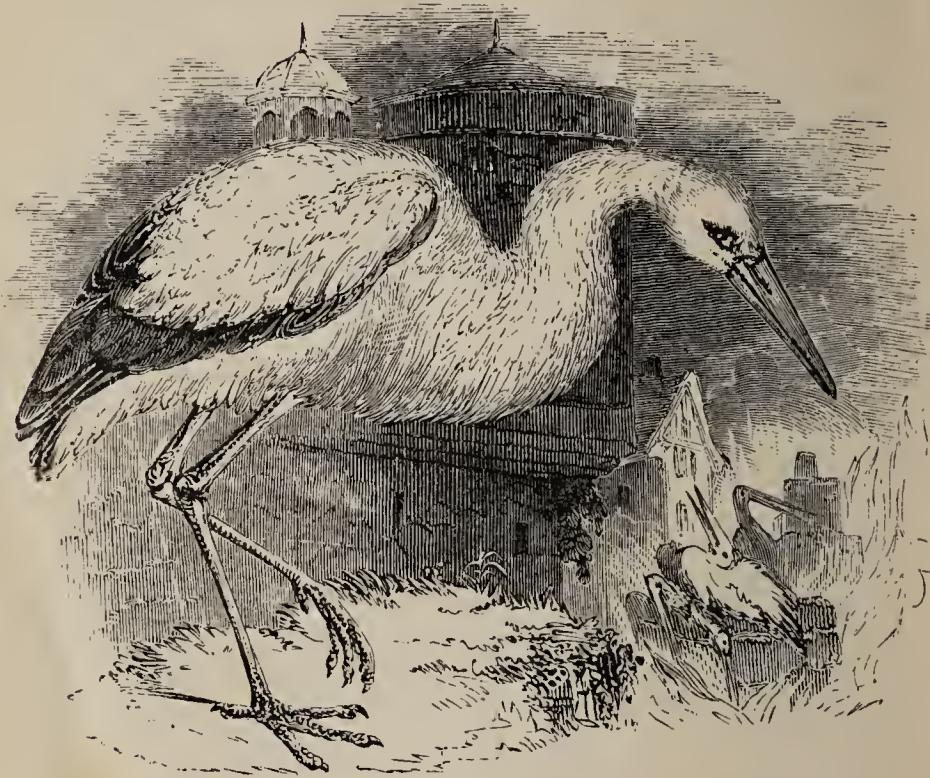
“ So that scarce  
The Bittern knows his time, with bill engulphed  
To shake the sounding marsh.”

The plumage of this bird is of a reddish yellow, beautifully spotted and barred with black. Bishop Stanley, in his History of Birds, mentions a very extraordinary *light* said to be visible in the breast of the American Bittern. He says, “ Most, if not all, of the birds of the heron genus, especially our common heron, have on their breasts a considerable space void of feathers, filled up by tufts of down, to which adheres a sort of clammy oily substance. It is not therefore unlikely, that this oily matter may, either by smoothing the water, or in some other way, enable the bird to attract, or (when attracted) to strike its prey with greater certainty.”

The Bittern is found in each of the four quarters of the globe. It was much prized amongst sportsmen in the days of falconry, and was an object for hawks to fly at. It is now rarely seen in this country, partly because it is its habit to hide all day in the flags and reeds of the water-side, and partly because it is becoming scarcer from year to year. When wounded, the Bittern defends itself fiercely and vigorously, and generally aims at the eye of its enemy. This bird is referred to, in its sad and lonely character, by the prophet Isaiah, in his declarations of God's purposes against Babylon, and of the desolation of His enemies : “ I will also make it a possession for the Bittern, and pools of water.” “ The cormorant and the Bittern shall possess it : the owl also and the raven shall dwell in it.” \*

\* Isa. xiv. 23 ; xxxiv. 11. See also Zeph. ii. 14.

## THE WHITE STORK.



THE Stork is a bird of the order called *Waders*. The legs in this class are long, and adapted for wading; while their bills are long and sharp-pointed, as if formed for the purpose of searching the bottoms of pools for food.

The Stork, which in some places is tame and familiar, walks about the streets, and is very useful in clearing them of filth: it also removes reptiles from the fields. On account of these qualities it is much valued in Holland; and we find from ancient writers that some nations not only protected them by their laws, but even had a superstitious veneration for them. The Mahomedans hold them in great esteem; and the Egyptians would look on a person as profane who should kill or hurt one.

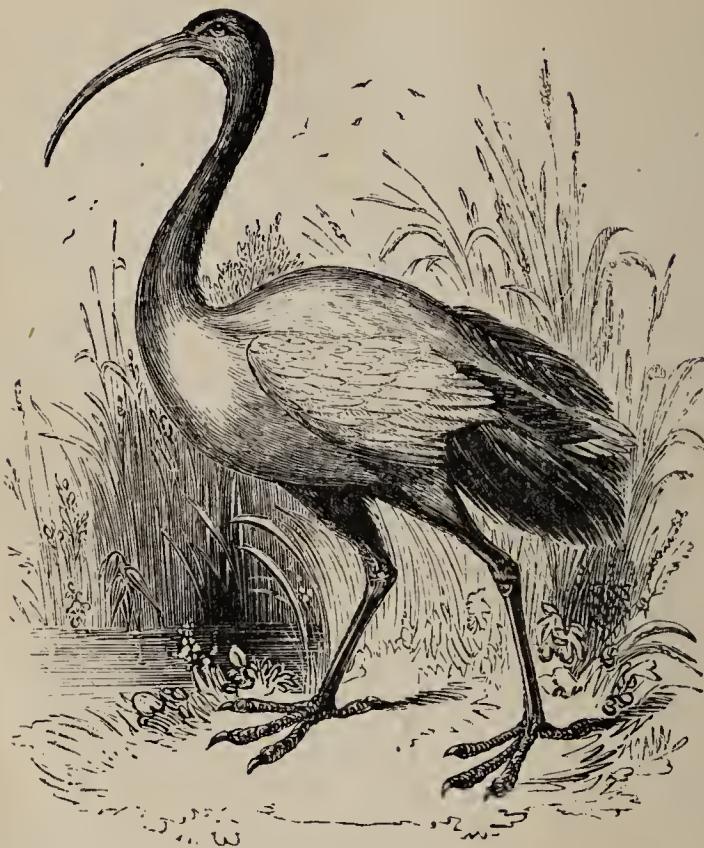
There were probably other reasons for the regard with which this bird was treated. It is celebrated for the dutiful attention it pays to its parents, for its kindness to its mate, and for the care it bestows on the education of its offspring. When the young birds begin to flutter out of the nest, the mother bears them on her wings, guards them from danger, and will sometimes perish rather than forsake them. A story is told in Holland, the subject of which is represented in our engraving, namely, that when the city of Delft was on fire, a female Stork in vain attempted several times to carry off her young ones ; and finding that she was unable to effect their escape, suffered herself to be burned with them. However this may be, the bird before us has often been referred to as a pattern of those virtues which chiefly promote domestic peace. One of the Roman poets speaks of a temple raised to CONCORD, “where the clamorous Stork is heard.”\*

These birds are inhabitants of southern Europe, Asia, and North Africa. They are birds of passage, migrate in large flocks, numbering many thousand individuals, and causing, in their flight, a portentous rushing sound by their huge wings. They show great exactness in the time of their departure from Europe to more genial climates. Allusion is made in Holy Scripture to their sagacity in observing times and seasons, as superior to that of thoughtless man, who is so apt to be regardless of the warnings given him : “Yea, the Stork in the heaven knoweth her appointed times ; and the turtle, and the crane, and the swallow, observe the time of their coming ; but my people know not the judgment of the Lord.”†

\* Juvenal.

† Jer. viii. 7.

## THE SCARLET IBIS.



THIS is a most splendid bird when in full plumage. It is a native of the tropical regions of America. When fully grown it measures about twenty or twenty-four inches in height. The young, when first hatched, are covered with a blackish down, which soon changes to an ash-colour, and at length becomes nearly white. After the second moulting, the plumage assumes a tinge of red, which gradually becomes deeper. The brilliancy increases with the age of the bird. In its native state it frequents the sea-shores and mouths of rivers, feeding upon insects and small fish.

The connexion of one species of this bird, though not of the scarlet kind, with the history of ancient Egypt, renders it extremely interesting ; it having been

an object of idolatry three thousand years ago in that superstitious country, where it was embalmed with the most scrupulous care. There was much uncertainty respecting the ancient Ibis, till Bruce, the traveller, showed that a living bird, common on the banks of the Nile, was a descendant of the bird represented on the temples and obelisks of antiquity, or preserved in a mummy state in the Egyptian tombs. M. Cuvier, after a careful anatomical comparison of the ancient mummies with recent specimens, established the truth of this assertion, and gave greater interest and importance to a creature which had remained unnoticed, after having for centuries been adored by the people of Egypt.

Probably, a principle of gratitude induced the Egyptians to pay divine honours to a bird which was so useful in destroying the serpents, frogs, locusts, and vermin, that infested their country ; whilst a motive of fear led them to worship their enemy, the crocodile.\* Bishop Stanley, however, speaking of the worship paid by the Egyptians to the Ibis, says, “We are inclined to attribute this respect for it to another cause ; namely, a fancied resemblance to the moon, whether from the curved and crescent shape of its beak, or from the contrasted colours of black and white, which, in the opinion of an ancient writer,† made it appear as if marked with a crescent. Now the moon, as well as the sun, was a known object of worship amongst many of the heathen nations, and more especially the Egyptians.”

While we wonder at the blindness of their “foolish hearts,”‡ we should recollect that our ancestors in Britain were once worshippers of “them which by nature are no gods,”§ and be thankful that, by the grace of God, we have been “called out of darkness into His marvellous light.”||

\* Juv. Sat. xv. 2, 3.

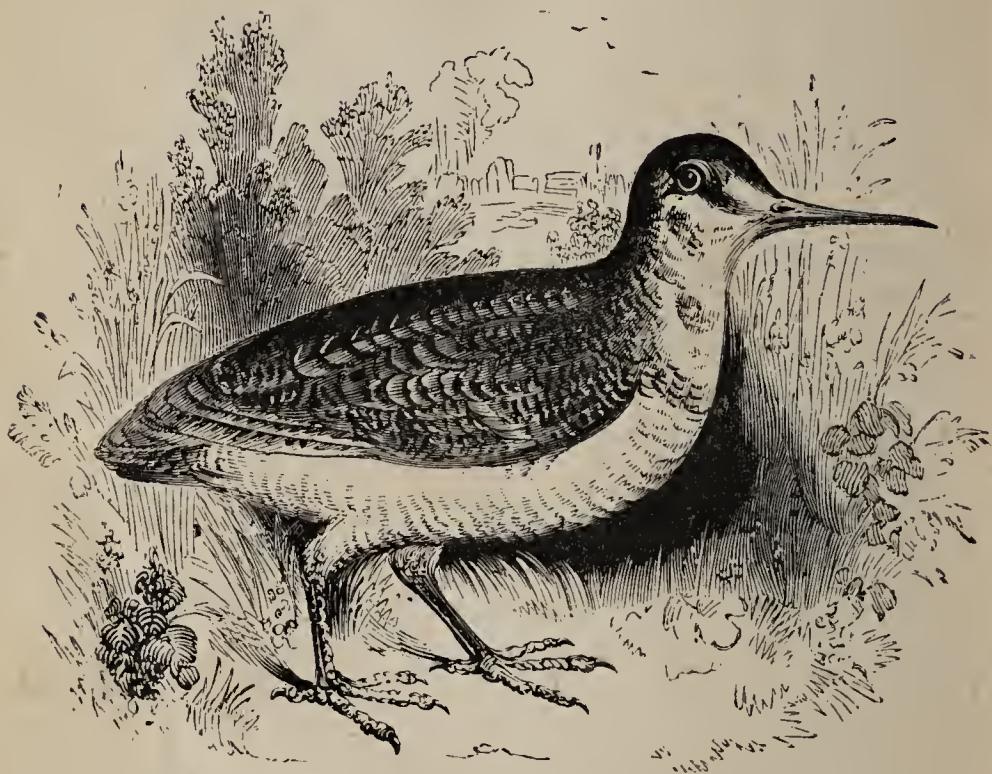
§ Gal. iv. 8.

† Plutarch.

|| 1 Pet. ii. 9.

‡ Rom. i. 21.

## THE WOODCOCK.



THE flesh of this bird has a very fine flavour; and the Woodcock is, on this account, often sold at a much higher price than a bird of a larger size. It is not in general a native of Great Britain, but comes over to this country from Norway, Sweden, Lapländ, or some other northern region, as soon as the frost begins in those cold parts of the world. These birds arrive among us at about the end of October, but not in great numbers till November and December. Their first appearance on land is usually on the western shores of Ireland, and on the island of Scilly, to the west of the Land's End, Cornwall. The Woodcock does, however, occasionally breed in England.

Woodcocks are sometimes found so much tired and weakened by their long flight across the sea, as to allow

themselves to be taken with the hand, on their alighting near the coast.

They live on worms and insects, which they search for with their long bills in the soft ground. They feed principally by night.

Most of them leave this country about the end of February or the beginning of March, and retire to the wild solitudes which they had quitted. They proceed to the coast; and if the wind be fair, they set out at once in large flocks; but if it be against them, they wait in the neighbouring woods and thickets for a favourable change. It is estimated, that when fairly on the wing, they travel at the rate of from one hundred and twenty to one hundred and fifty miles per hour.

In the means and facilities of flight possessed by these birds, strong proofs are afforded of the wisdom and power of the divine Creator. His provision for the flight of birds awakens the attention and admiration of every thoughtful and well-disposed mind. "If," says Dr. Roget, "the excellence of a mechanic art be measured by the difficulties to be surmounted in the attainment of its object, none surely would rank higher than that which has accomplished the flight of a living animal. No human skill has yet contrived the construction of an *automaton* capable, by the operation of an internal power, of sustaining itself in the air, in opposition to gravity, for even a few seconds, and far less of performing in that element the evolutions which we daily witness."

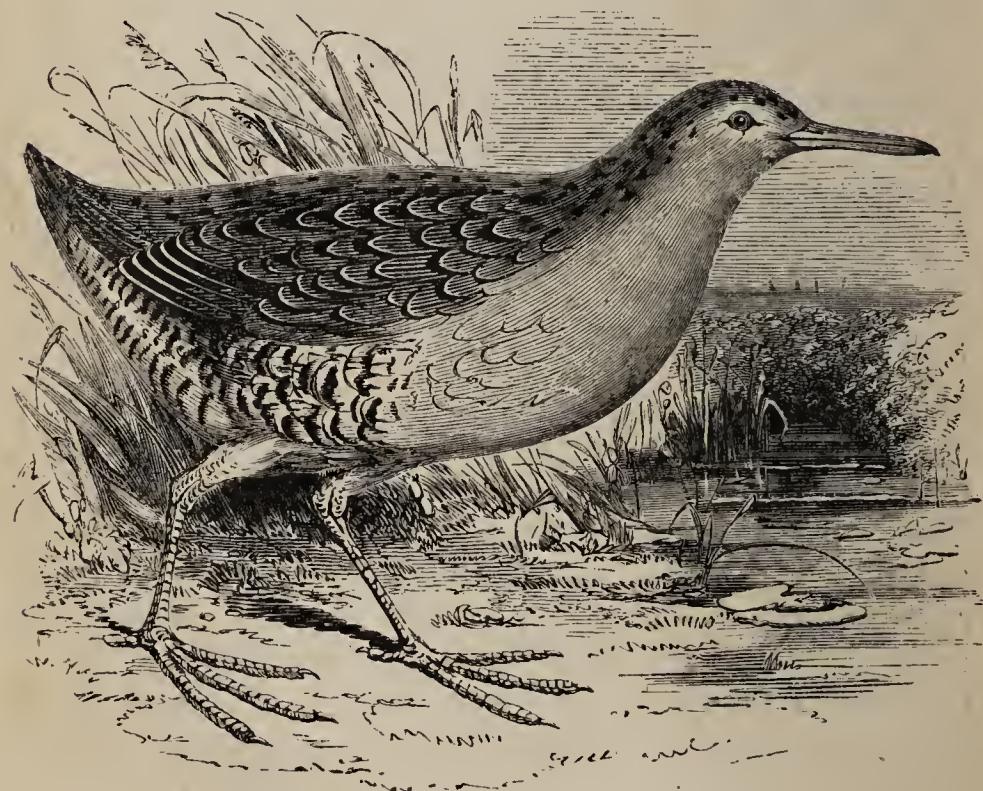
---

### THE RAIL.

THE *Rallidae* (*Rails and Coots*) are birds which frequent the neighbourhood of lakes and morasses, and are fond of swimming and diving. The reeds and rushes, with the piece of water, in the engraving, show

the kind of scene in which these birds are generally met with. They are so formed that they can easily thread their way through the thickest beds of reeds and bulrushes, in which they are often able to conceal themselves from the dog, and to get out of the way of the gun.

The Land Rail, when danger is near, glides silently and rapidly through the tall grass of the meadow as if by magic; the bird is thus neither seen nor heard, and is careful not to be driven to take wing. It is



found all over Europe, and in some parts of Asia. In our country it is by no means rare, but it is exceedingly shy. When it fancies that it is seen, it winds with astonishing rapidity through the high grass of the meadows, or disappears in some hole or recess, remaining concealed until the cause of alarm has passed away.

Whilst moving about in search of food, which consists of various insects and worms, the Water Rail, like the moor hen, has a way of jerking up its short tail.

Its bill is long and slender, and slightly arched. Its nest is made of coarse grasses, and is carefully placed in the safest and most secret hiding-spot that the mother can find in all her haunts. The eggs, from six to eight in number, are of a yellowish-white colour, marked with spots of black. The young, on coming forth into the light, are covered with black down. They follow their parents, and very soon begin to swim, as well as run about. The length of the full-grown Water Rail is about twelve inches.

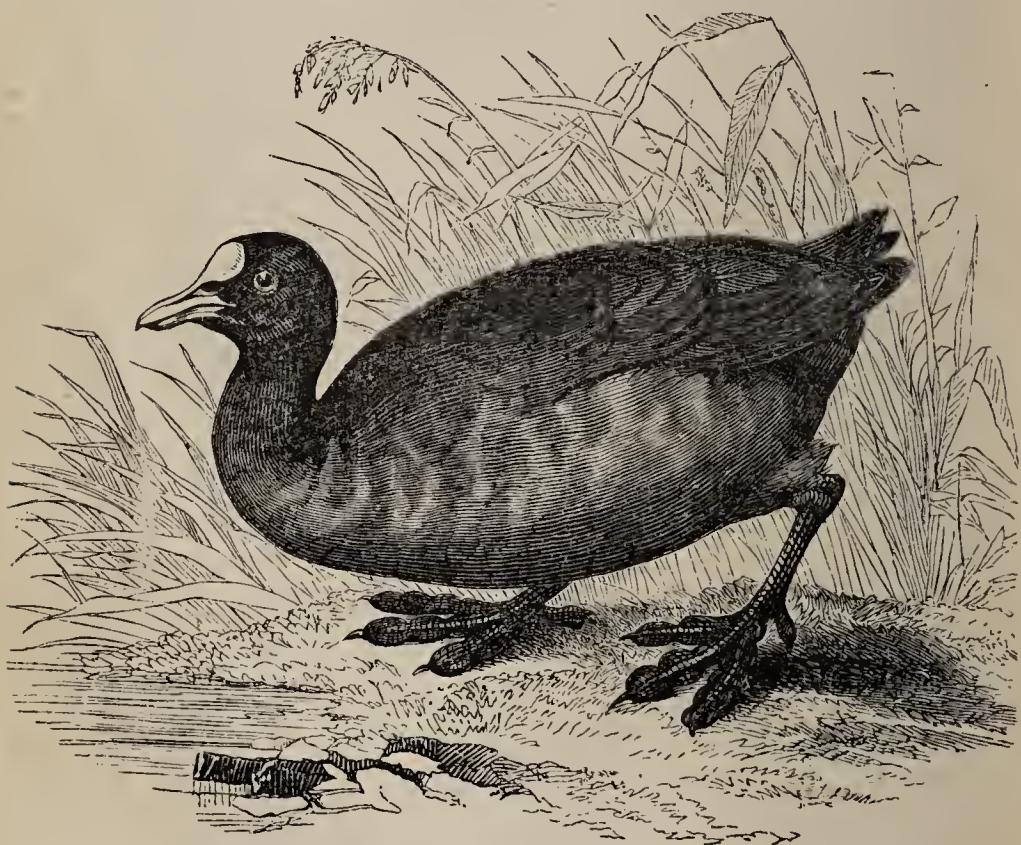
---

### THE COOT.

THE Coot is generally found throughout Europe. It has been also met with in Japan. In England this bird inhabits the neighbourhood of large sheets of water, particularly such as are surrounded by reeds and tall water-plants, which are capable of affording cover and concealment suited to so shy a bird. The Coot is about seventeen or eighteen inches in length: the head and neck are greyish black, the back and sides a deep blue-black, and the under parts a blackish grey tinged with blue. The horny plate on the head is red in the breeding season, but white at other times; from this appearance the bird derives its name of "Bald Coot." Its legs are yellow-green, and the bare part of the thigh orange-red.

The Coot is active and lively both on land and in water. In country places it may be seen early in the morning, moving about very busily in long marshy meadows near the water, searching for slugs, worms, and different insects, of which its food chiefly consists. It is not fond of severe winter weather. When the frost sets in very sharply, the Coot, free as the air, pays a visit to the milder districts of our island, and may be met with in the south, as at the Southampton Water, and other temperate localities.

The nest of this bird is quite a curiosity, being a huge mass of grass, rushes, large leaves, and a mixture of various herbage, placed among the reeds near the water, or sometimes within the margin of the water, and rising some inches above its surface. These clumsy-looking nests are firm and solid; but they are not unfrequently torn from their moorings by floods, and carried down the current. Instances have been known in which,



on such a separation of the nest from its hold, the mother-bird has continued sitting upon her eggs, which have remained unhurt.

It is delightful to trace a mother's tender care in dumb animals. What kindness does the great Creator show in endowing them with this instinct! And how does He thus ennable them in our sight! What affecting lessons do they afford to many who are gifted with reason, and the blessings of true religion!

The eggs of the Coot, from seven to ten in number, are of a greenish white thickly spotted with brown : the egg-shell is remarkably thick and strong.

---

## THE FLAMINGO.

THIS is a very extraordinary bird. Its legs are of great length, and so slender that at a little distance the one leg on which it usually stands is not easily seen, and the bird seems stationary in the air. It hatches its eggs sitting astride on a nest of raised earth, as its long legs prevent its adopting any other position.

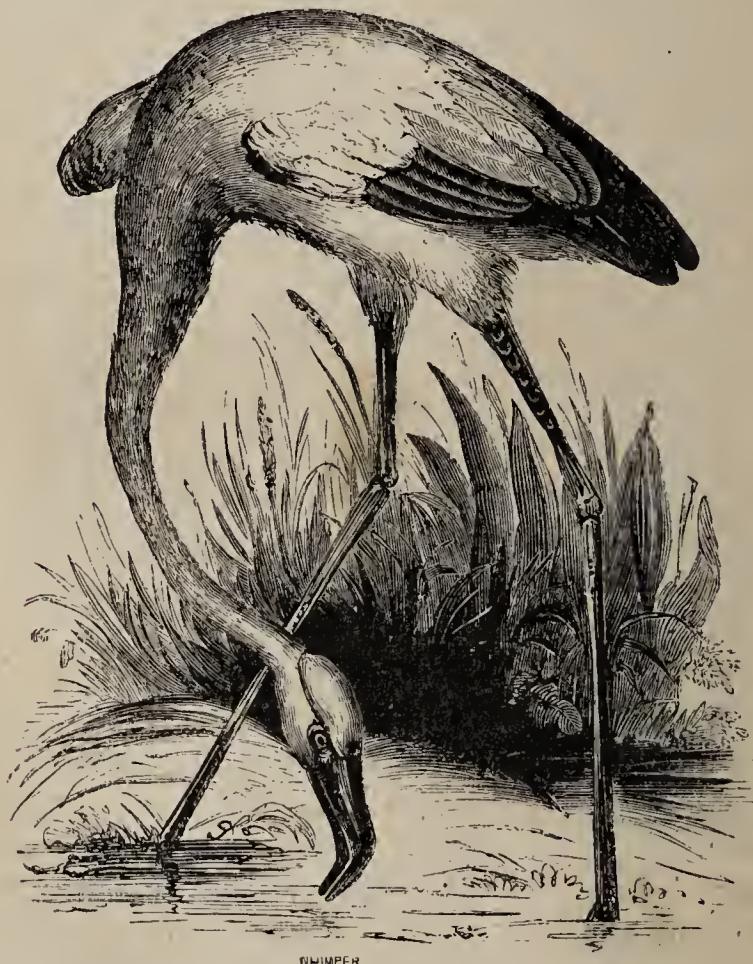
The common species, represented in the engraving, is sometimes more than six feet in height, and above four feet long from the bill to the tail. Its plumage varies in colour according to the age of the bird. In the third year, when it is full grown, the back is of a purple red, and the wings of a bright rose colour.

Bishop Stanley, in his account of the Flamingo, notices the "almost broken and deformed appearance of the beak," and the manner in which the bird feeds, by turning its head, and scooping up the soft substances on which it preys, using the upper mandible as a sort of spoon.

These birds were once known on the coasts of Europe, but are now chiefly found in America, and certain parts of Africa. In some of the wild and solitary tracts of America they live in a state of society which cannot but excite our wonder. It is said that they are always met with in flocks, and that they form in file for the purpose of fishing, having quite a soldier-like appearance. They are accustomed to establish sentinels for common safety ; and whether reposing in ranks, or fishing, one of them always stands on the watch with his head erect. If anything alarms him, he sets up a cry like the sound

of a trumpet, when the flock moves off with great rapidity, but in a settled order of flight.

The ancient epicures admired the flesh of the Flamingo, especially its tongue, which, however, is said to be oily, and of an unpleasant flavour to modern palates. A Roman poet mentions this bird, under the name of



*Phoenicopterus*, as a delicacy served up at the tables of the great in his day. His old English translator, for want of the word Flamingo, quaintly styles it "the huge Crimson-wing."\*

Attempts have been made to domesticate these birds, but in our climate they soon languish and die. One of

\* Holyday's Juvenal.

them lost a leg by an accident, and afterwards walked with the other, using its bill and neck like a crutch.

The down of the Flamingo is useful. The Indians make bonnets of the feathers. The Sardinians form the bone of the leg into a flute.

---

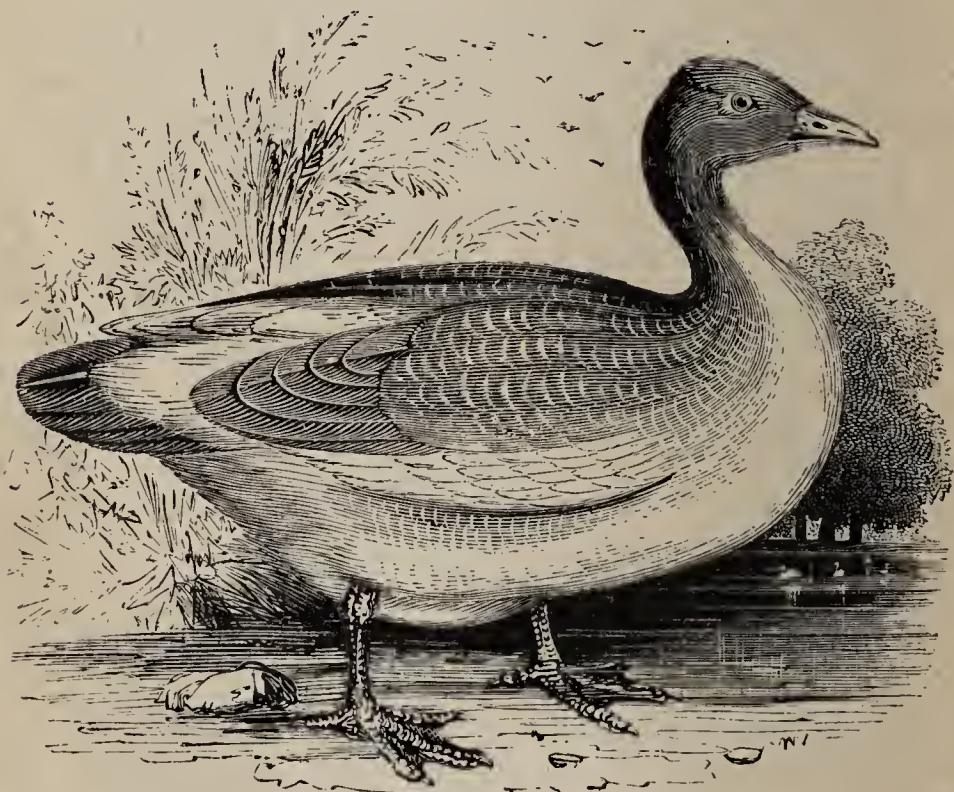
### THE COMMON GOOSE.

THE domestic Goose is of great service to man in various ways. It is valuable as an article of food, while its quills and feathers serve many important uses. Geese are kept in vast quantities in the fens of Lincolnshire, and are sent from thence to London, when ready for market, in droves of from 2,000 to 9,000. Immense numbers of them are also sent from Norfolk and other counties ; arriving in London at Michaelmas and at Christmas, the two seasons of the year which are most fatal to geese. Persons who keep flocks of these birds in the country generally pluck them for feathers and quills four or five times in a year, and thus find them very profitable. The old geese submit with tolerable patience to this cruel operation, but the young ones are clamorous, and show the pain which they suffer. Cottagers and others, living near commons, can turn the rearing of a few geese to good account.

But besides the pecuniary worth of the Goose, it has certain qualities which ought to have secured it from the contempt in which, for its alleged stupidity, it is often held. It shows constancy and affection, not only to its own species, and to other birds and animals, but particularly to man ; and it is not improbable that these qualities, which were known to the ancients, might have rendered it an object of high esteem, and occasioned its being consecrated to Juno, the queen of their idol gods. We learn from Livy, that, 2,230 years since, some of these birds saved the citadel of Rome from the invasion

of the Gauls, who during the night had nearly succeeded in obtaining an entrance within the walls. The geese commenced a loud cackling, and awakened the Romans in time to force the enemy to retire.

Geese are migrating birds, and can remain much longer on the wing than we are apt to imagine, considering their apparently heavy gait. The tame geese belonging to several Cossack villages near the river Don in Russia, leave their homes in March or April, as



soon as the ice breaks up, and take flight in a body to the more northerly lakes, the nearest of which must be five or six hundred miles off. In the beginning of the winter they return with their young broods to their respective dwellings.

Derham, speaking of the migration of birds, says:—  
“This leads me to another thing remarkable in this act

of migration ; and that is, that those unthinking creatures should know what way to steer their course, and whither to go. What but the great Creator's instinct should ever move a poor foolish bird to venture over vast tracts of land, but especially over large seas ? ”

---

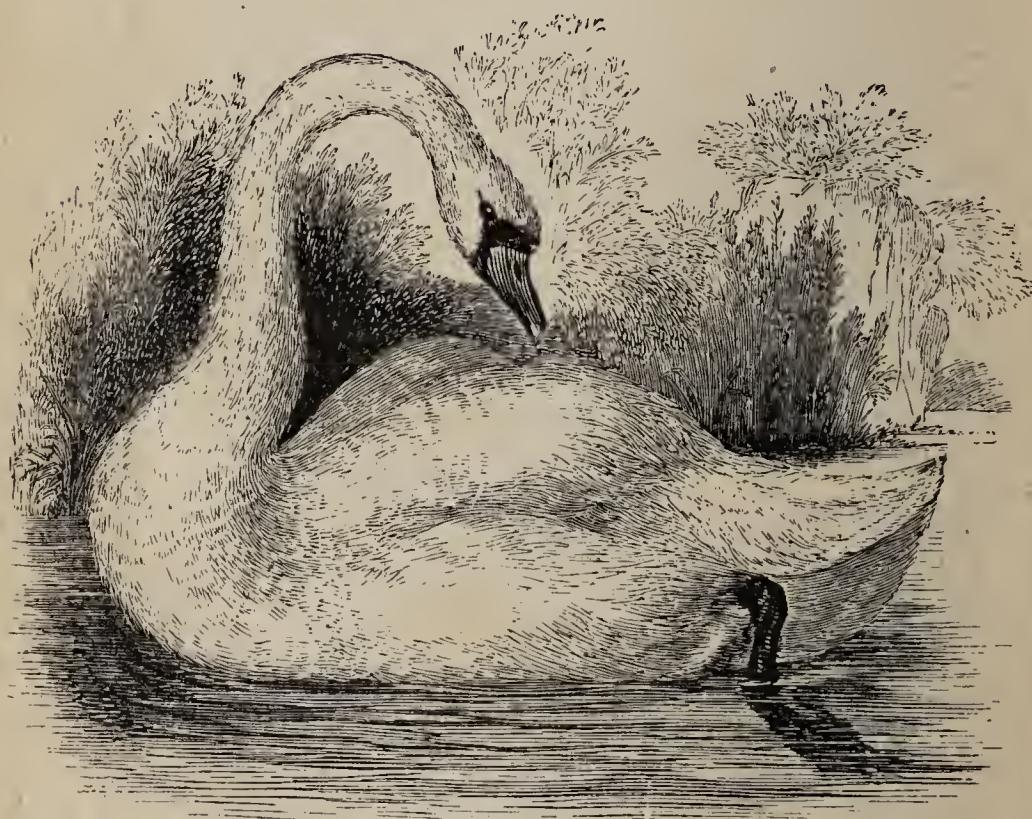
### THE TAME SWAN.

THIS graceful creature is one of the large tribe of *Natatores*, or swimming birds, and is distinguished from the rest of the family to which it belongs by the great length of its neck. There are very few birds which exceed it in size. It lives almost always upon the water, and prefers open lakes. It feeds chiefly on water-plants, which it is enabled to reach by means of its long neck ; for it seldom if ever plunges its whole body beneath the surface. It also eats frogs, snails, and several kinds of insects. It is fond of bread, biscuit, and all kinds of grain, and in winter is chiefly kept on that kind of food which is given to ducks and geese. There seems good reason to suppose that it never feeds on fish. The fish-ponds to which these birds are confined do not suffer any diminution from their presence ; and Mr. Yarrell states that he has never found fish in the stomachs of any Swans which he has dissected.

When kindly treated the Swan is as gentle in its temper and habits as it is majestic and elegant in form ; but when annoyed, and compelled to defend itself, it is a powerful enemy. Its large size, and vast muscular power, give it a great advantage in this case. Though it never molests the small water-fowl that inhabit its domains, it is said to have sometimes fought and repelled the eagle, when that bird has shown a disposition to disturb it. Bingley gives an account of a Swan which, while sitting on her eggs among reeds at the water's

edge, saw a fox swimming towards her. She instantly darted into the water, and having kept him at bay for some time, drowned him, and then returned to her nest.

The Swan is a good mother. She builds her nest of twigs and reeds, and lines it with a comfortable coating of feathers. As soon as the young swans, which are called cygnets, are hatched, they are carried by both parents from their nest on the bank to the water, and



for two or three weeks afterwards are borne upon their backs, or placed for warmth and shelter beneath their wings.

Swans are met with in a wild state in almost every country of Europe. They are birds of passage, and, notwithstanding their weight and size, travel with vast speed through the air.

Black Swans are found on the western coast of New

Holland, as well as in New South Wales and Van Diemen's Land. Some fine specimens are in the gardens of the Zoological Society.

A Black Swan was among the ancients a proverbial expression for a great rarity,—a prodigy that the world seldom or never saw. This proverb has quite lost its meaning.

---

### THE COMMON DUCK.

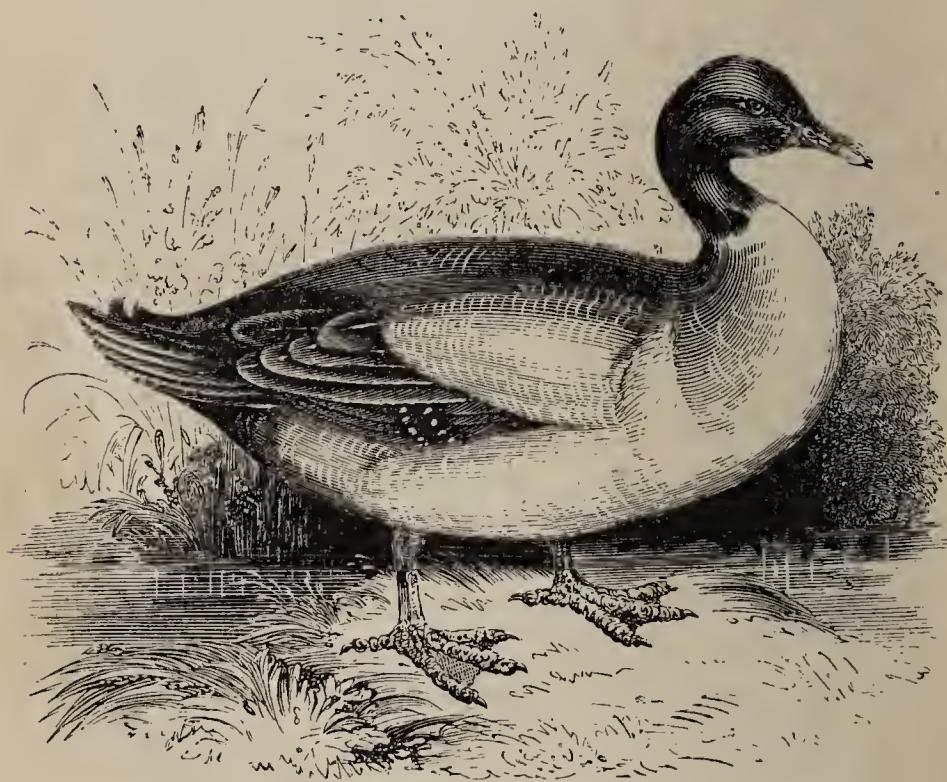
THERE are many species of the Duck ; but the bird here represented is so familiar to all that it is not necessary to describe it. It appears, from the statements of good naturalists, that cottagers and others who rear ducks would do well to prevent the young ones from swimming until they are more than a month old, water not being necessary for them for some time ; and that the ducklings should be fed upon barley-meal, or curds, and kept in a warm place at night.

Of all people in the world, the Chinese are said to be the most skilled in the management of poultry, particularly of ducks ; many persons in Canton earning their livelihood merely by bringing them up : some buy the eggs and trade with them ; some hatch them in ovens, and others attend on the young ones.

Ducks, like geese, have a strong sense of affection ; in illustration of which Bishop Stanley tells the following pleasing anecdote :—“ A clergyman had a very fierce and noisy house-dog, within the length of whose chain it would have been dangerous for a stranger to have ventured : but, notwithstanding his apparently savage disposition, a brood of ducklings, reared in the yard in which he was kept, soon became so fond of him, that whenever, from his barking, they apprehended danger, they would rush towards him for protection, and seek shelter in his kennel.”

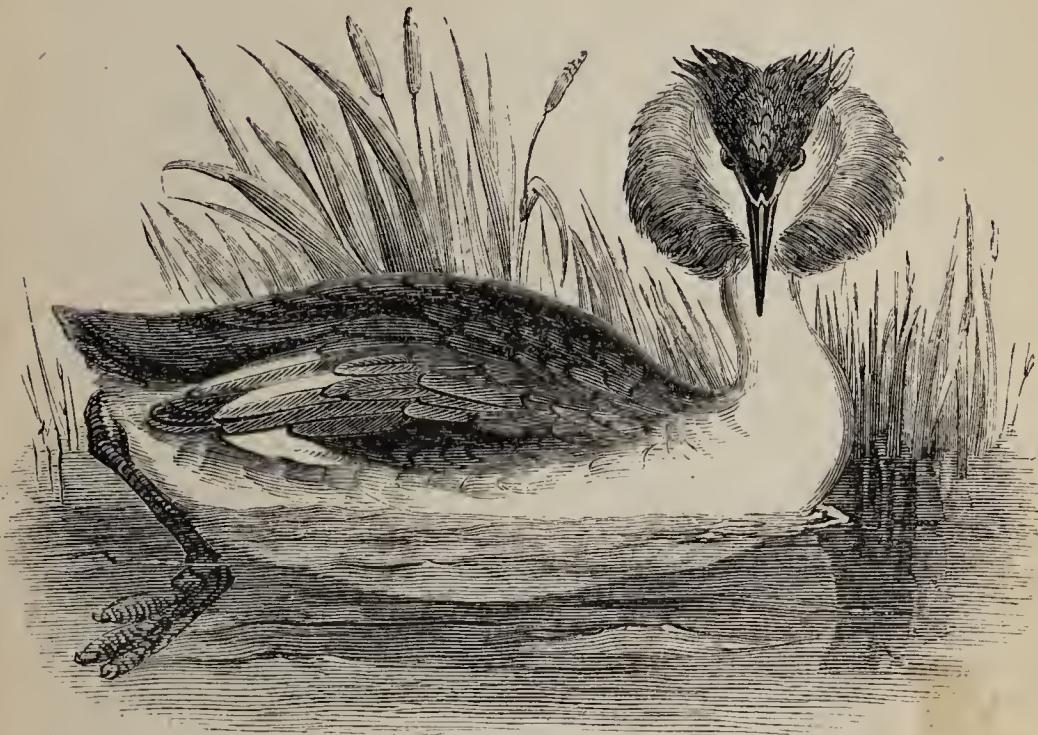
He concludes his history of Ducks with an account of the decoys, which are formed of wickerwork and netting, and by means of which, through the help of tame birds, called Decoy Ducks, and dogs trained for this purpose, vast numbers of wild fowl are taken every year.

Ray, in his great work, mentions it as one of the instances of the wisdom of God in His works, that the several tribes of animals should, in a very early stage of their existence, know their own powers and places



of food; as for example, "that such creatures as are whole-footed, or fin-toed, viz. some birds and quadrupeds, should be naturally directed to go into the water, and swim there, as we see ducklings, though hatched and led by a hen. If she brings them to the brink of a river or pond of water, they presently leave her, and in they go, though they never saw any such thing done before, and though the hen clucks and calls, and doth what she can to keep them out."

## THE EARED GREBE.



THE birds of the family of *Colymbidae*, or Divers, are so formed as to be remarkably well fitted for the water, on which they chiefly dwell. On land the Grebes are heavy and inactive, shuffling along, like seals; but in their own element they look quite different creatures, alert and vigorous, and chasing the fish, their prey, with the swiftness of an arrow. The annexed cut represents a male Eared Grebe in full plumage. The reader's attention is called to the feet of the bird, which differ from those of every other kind of water bird. They are not webbed, like the duck's or those of other swimming birds; but the toes are separate and flattened, each toe being in itself a well-formed oar. The legs are placed far back in the body, giving the creature a great advantage in swimming, but causing its awkward

gait when on land. The head of the Eared Grebe is narrow, the beak long and sharp, the neck long, the body boat-shaped. The crest on its head, and the ruff round its neck, give it a strange, but pretty appearance. When diving for its prey, its short wings add much to its speed, which is amazing.

The food of this singular bird consists of fishes, and water-insects ; but it has been observed that in its stomach is generally found a mass of its own feathers ; these having probably been swallowed by it whilst dressing its feathers, which are thick, full, soft, and silky. Thus in the stomach of the cow is often found a ball of hair, which the animal has taken into its mouth, whilst licking its coat, and swallowed, but not digested.

The Grebes make their nests among the reeds and herbage of marshes. The nest is composed of half-decayed roots, and other dead vegetable matter ; it is large and strong, though roughly built, and is so put together that it may rise or fall with the rise or fall of the water on which it floats.

The female lays three or four eggs, which she carefully covers up every time she leaves the nest. These interesting birds are found in every quarter of the globe.

The Eared Grebe is a rare bird in our island.

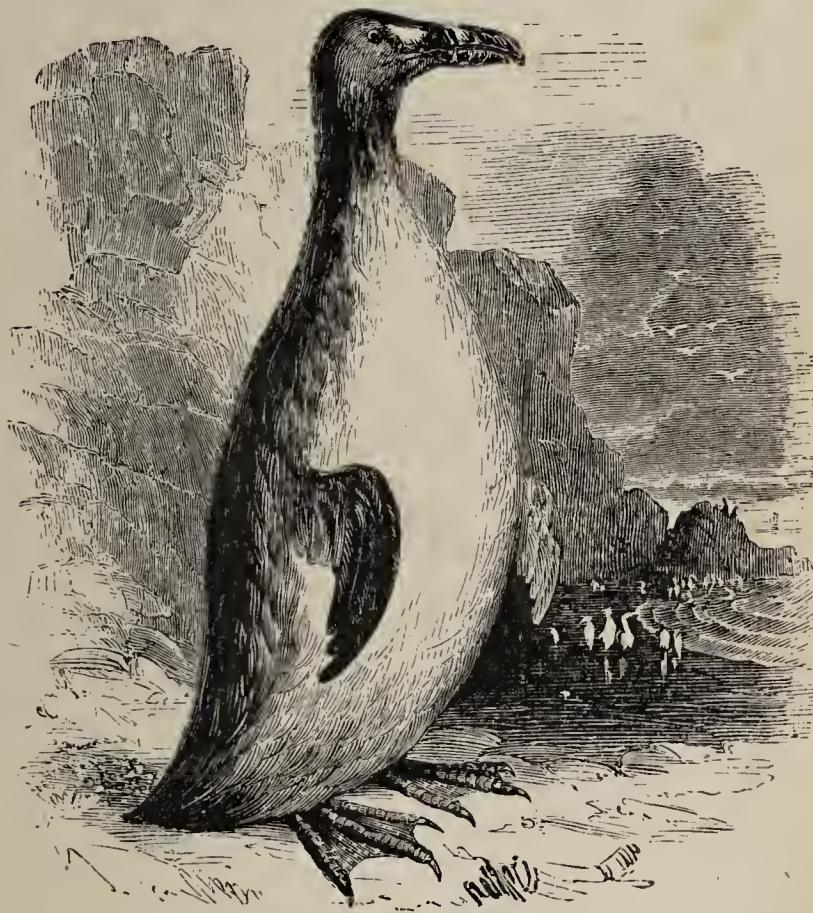
---

### THE PATAGONIAN PENGUIN.

THIS bird, called King Penguin, has such small and short wings, that it would in vain attempt to fly. But these wings, though small, are of great use to it when it seeks its food. The Penguin is fond of fish, and moves with amazing swiftness, by help of its wings, under water, in search of its prey. It passes the chief part of its life on or in the sea ; and being usually very

fat, it does not suffer from remaining a long time in a wet and cold state.

When on land, flocks of these birds may be seen walking upright in a formal, stately manner, holding their heads very high. They look, from a little distance, like a company of soldiers. As the feathers on the breasts of some of these species are beautifully



white, with lines of black about the neck, they have sometimes been compared, when seen afar off, to a number of children with white aprons, tied with black strings round their figures.

The Penguin loves a cold climate. It sleeps very soundly, and is extremely tenacious of life. The female lays a single egg. She makes a slight hollow in the earth, just large enough to prevent her egg from rolling

out. Some Penguins in the South Sea Islands are called Hopping Penguins, and Jumping Jacks; from their habit of leaping quite out of the water, sometimes to the height of three or four feet, on meeting with any check in their course through the sea. There is another species, called the Jackass Penguin, from its habit while on shore of throwing back its head, and making a loud strange noise like the braying of an ass; but at sea, when the bird is undisturbed, its note is deep and solemn, and is often heard in the night. The flesh of the Penguin is rank, and unfit for food.

---

### THE GREAT AUK.

THE family of *Alcadæ* consists of Auks, Guillemots, and Puffins, which are all strictly sea-birds, never visiting fresh water, as *Colymbidae* (the Grebes and Northern Divers) do. The wings of the *Alcadæ* are very short; and chiefly serve as paddles for assisting the progress of the bird in the water. The legs also are short but powerful, and placed far back in the body, so that, in resting on the sands or on a rock, the bird takes an upright attitude. In the annexed plate the Auk is seen in its element. It has just been diving below the surface of the ocean, near the icy Arctic shores; and, after a successful chase of its finny prey, among the surrounding icebergs, has risen to devour it. But it does not always eat the fish it catches. In some hole of a distant rock, perhaps, it has a young one waiting for food, which will soon be supplied by its parent with small herrings, sprats, or other fish.

In Norway, Iceland, Greenland, and Spitzbergen, or among the rock-bound shores of Labrador and Newfoundland, or (coming nearer home) on the northern islands of Scotland, multitudes of the several races of

these remarkable birds may be seen assembled, all living in harmony together, and rearing their little ones, which are fed from their parents' crops. There, on a narrow ledge, where she has carefully placed her own one egg, sits a female Auk, in the upright posture. In many rows, arranged in tiers, above and below, are others, practising a like maternal duty. But soon they are disturbed by the bird-catcher, who has been let



down from the edge of the cliff among them. Then what a rush to the ocean ! Numbers of birds that have escaped the blows of his bludgeon are seen riding on the waves ! But the Guillemot, which looks very like an Auk, refuses to quit the single egg over which it broods. It is called the Foolish Guillemot on account of this neglect of itself. Its love is stronger than its fear.

There are other birds which, because they suffer

themselves to be easily taken, have received nicknames, such as Booby and Noddy. This facility in being taken has often proved a blessing to poor mariners who, when cast about on the open sea, and pinched with hunger, have hailed with delight the appearance of these birds, which have come to their relief at the time of their greatest need. There are affecting instances of this in Captain Bligh's account of his open-boat navigation, after the mutiny of the "Bounty," in the spring of 1789. He and his crew, eighteen men in all, were rejoiced, when a silly sea-bird was caught by hand, and divided equally among them.

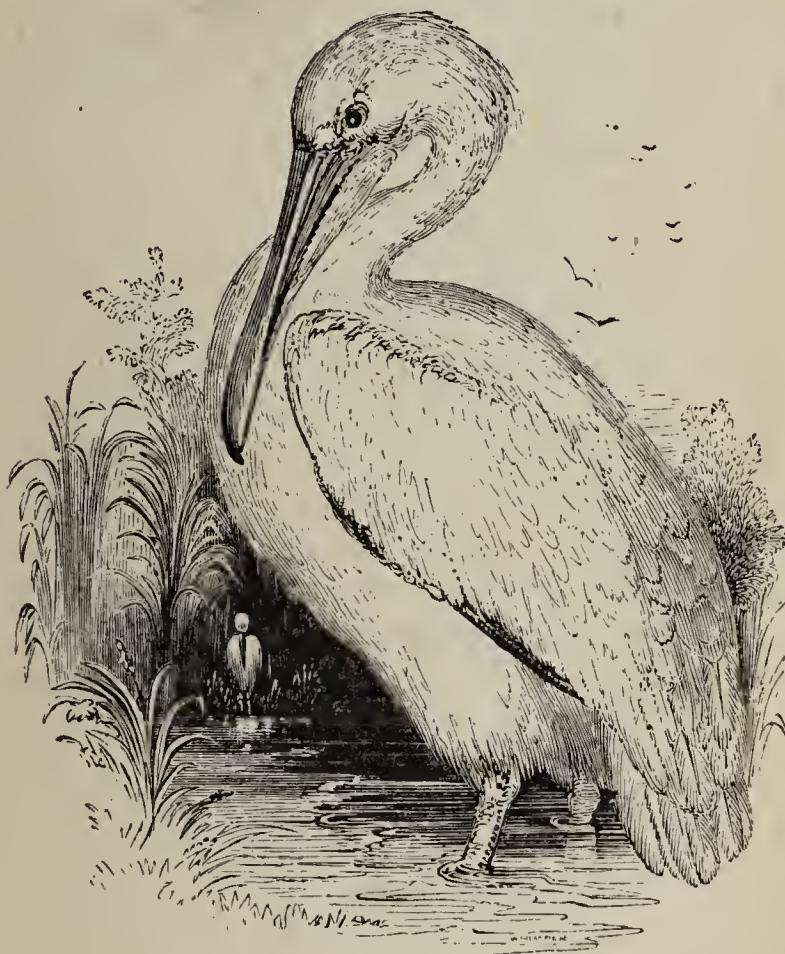
---

### THE PELICAN.

THIS bird is found in Asia and Africa, and affords another illustration of the wonderful works of God in the creation. The bill of the Pelican, frequently sixteen or eighteen inches long, has attached to its lower portion a pouch, which extends for some distance down the fore part of the neck. The fish on which it preys are immediately stowed away in this pouch in sufficient quantities for a meal, not only for itself, but often also for its family. Having collected its store, it retires to some neighbouring rock, or other solitary place, to satisfy its craving appetite. The pouch, when stretched to its utmost, contains from two to three gallons of water. The old birds are by its means enabled to bring home food for their young, emptying it into their throats by pressing the bill upon the breast—an action which has given rise to the pleasing but erroneous story of the Pelican feeding its young with its blood. In the same manner the males feed the females when the latter are sitting on the eggs.

Some fine specimens of this interesting bird are to

be seen in the Zoological Society's collection. "The white, or common Pelican, is almost entirely white when in its adult state ; the quill-feathers, however, which are scarcely visible when the wings are closed, are black ; and the whole plumage, as the bird advances in age, exhibits a slight tinge of flesh colour, which is sometimes mixed with a shade of light yellow. The bill is,



at this period, of a dull lead colour on the sides of the lower mandible, and along the middle line of the upper, which is yellowish in the intermediate part, and reddish at the edges, the hooked tip especially becoming of a bright red. The iris is deep brown ; the naked part of the cheeks flesh-coloured ; the pouch of a light straw colour ; the legs and web dingy yellow, with somewhat

of a leaden cast ; and the claws black. On the greater part of the head and neck the plumage is nothing more than a short, close, even down, gradually passing into feathers, and forming on the back of the head a kind of tuft which falls downward over the hinder part of the neck.”\*

The Pelican is mentioned in the Old Testament as an unclean bird,† which might not be eaten by the Jews. It is a bird of lonely habits. David, in his afflicted and solitary state, compares himself to a “Pelican of the wilderness.”‡

---

### THE CORMORANT.

THESE birds are found on many of our sea-coasts, and are common in the isles of Scotland. They build their nests on the highest parts of the cliffs which hang over the sea. They are proverbial for their voracity, each Cormorant devouring three or four pounds of fish a day, which is about half the average weight of the bird. As is the case with most birds living on fish, however, its digestion is extremely rapid, and it requires a proportionably larger supply of food. If deprived of this, it soon dies. On the Western coast of the Hebrides, in severe gales, when no fish are to be got, these poor birds are to be seen huddled together in their caves and crevices, perishing with hunger.

The talent for fishing possessed by some species of this genus is turned to good account by the crafty Chinese fisherman, who fastens an iron ring round the bird’s neck, so that it cannot swallow ; thus prepared, he sits quietly in his boat till he sees a fish, when the bird is tossed into the water ; it dives, and presently rises with the fish, which is seized upon by the boatman, who then waits for another chance.

\* “The Gardens and Menagerie of the Zoological Society delineated.”

† Leviticus xi. 18.

‡ Psalm cii. 6.

Bishop Stanley mentions a couple of Cormorants which were kept as "pets," and were found to be quiet enough, except when pressed by hunger. One day a gentleman's servant, who went in to look at them, had on a pair of red plush breeches, which instantly caught



their attention. These they probably mistook for raw meat, which was their ordinary food : they consequently made such a furious charge upon the poor young man, that the owner was obliged to attack them with a stick, and even then could not keep them off without diffi-

culty. They were at last sent away for killing a favourite pointer.

We cannot conclude our notice of this remarkable bird without calling attention to the peculiarity of its leg and foot, and their fitness to its mode of living. This bird has to seek its food beneath the surface of the water. Its erect form, and the backward position of its legs, must greatly assist it in diving after fish. Its four toes are webbed and connected together, presenting an example of a completely webbed-foot, which gives it great velocity under water ; and its leg is so flattened at the sides, that the front edge, which cuts the water, is scarcely thicker than the blade of a carving knife.

---

### THE GREAT BLACK-BACKED GULL.

THE family of Gulls is very numerous—"a class," says Bishop Stanley, "which the sailor is sure to find wherever he goes, whether under the burning sun of the tropical regions, or the frozen icebergs of the Arctic Circle, and always bearing the same noisy, restless character."

Among the various species of Gulls are the Burgo-master, and the Laughing Gull ; the former so called from its superior power and command over other birds of the same kind ; the latter from its constant noise, which seldom ceases for more than one hour out of the twenty-four. But of all this tribe, differing one from the other in certain particulars, the Great Black-backed Gull is the most frequently seen, and is, perhaps, the finest bird. It is found along the coast of the States of North America, and is common in the Orkneys and Hebrides. It is constantly met with on our own shores. With its wide flapping pinions, sailing quietly and confidently along, it attracts the notice of all who visit the coast. Settling suddenly down on the surface of the

sea, it rises and falls with the billows without an effort, and appears unmoved in the midst of heavy gales. Gulls float upon the water, but do not dive. Pouncing down, they skim their food from the surface, or pick it up from the muddy beach at the ebb of the tide. They are coarse feeders, and sometimes eat almost to

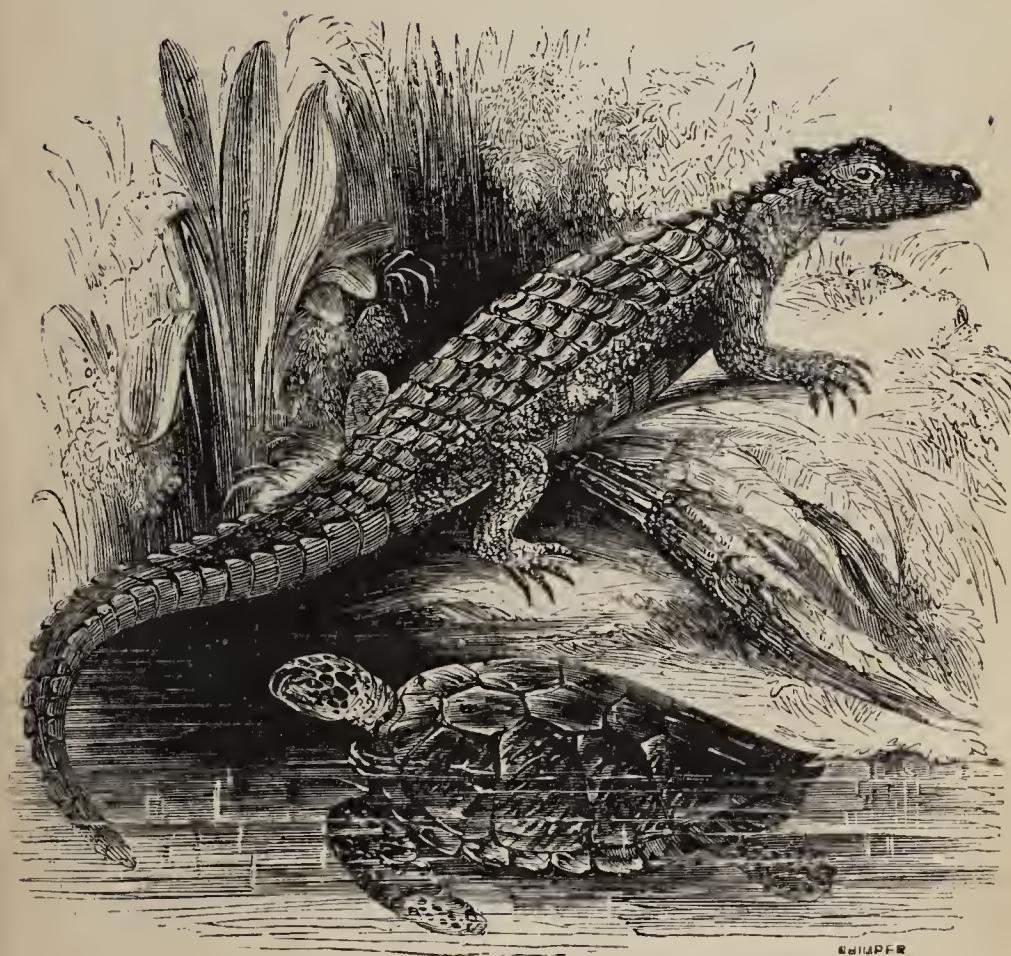


suffocation. Fish, dead or alive, carrion, things that other creatures have left untouched, are welcome to the appetite of these birds, which have been well styled "the scavengers of the sea."

The plumage is deep, full, and soft. The Gull builds a nest of rushes and grass. The eggs are three or four in number, of an olive-green, blotched with black.



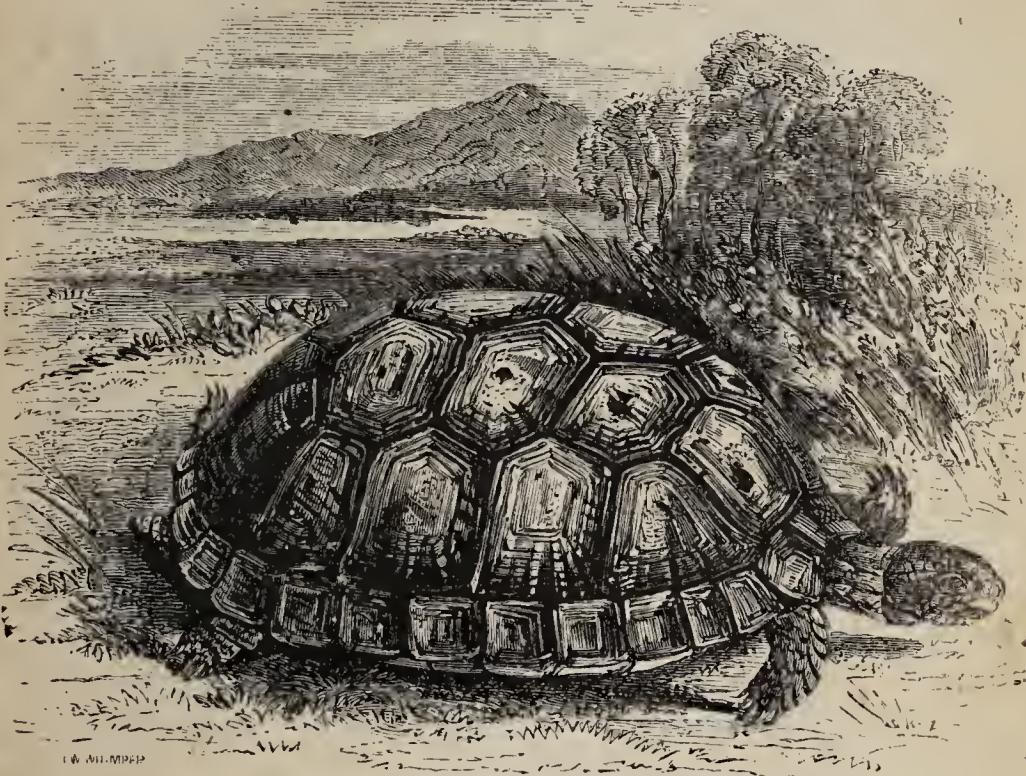
## REPTILES.



BRUMPER

"The REPTILIA, according to most Naturalists, include five orders, the *Testudinata*, or Tortoises and Turtles, the *Enaliosauria* of Conybeare, to which the gigantic fossil genera, the *Ichthyosaurus* and *Plesiosaurus*, belong; the *Loricata*, or Crocodiles and Alligators ; the *Sauria*, or Lizard tribe ; and the *Ophidia*, or Serpents."—*Bell's History of British Reptiles.*

## COMMON BORDERED TORTOISE.



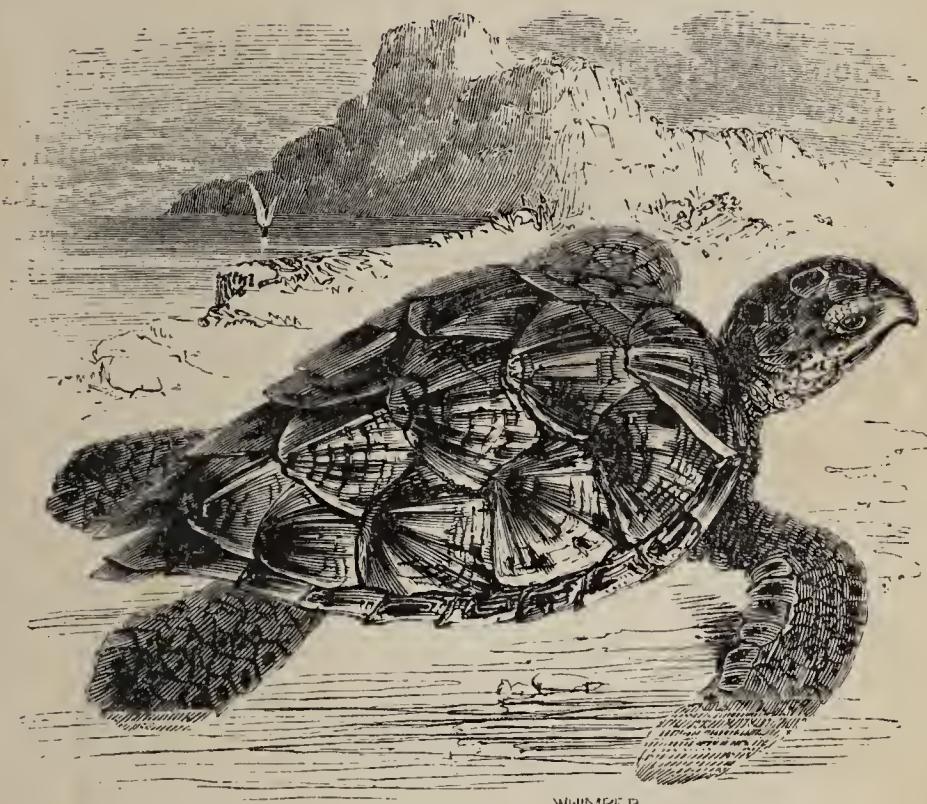
THIS curious creature is of the order *Chelonia*, so called from *chelone*, a Greek word signifying a Tortoise. The order may be divided into—1, Land Tortoises, as the above; 2, Marsh Tortoises; 3, River Tortoises; 4, Sea Tortoises, or Turtles. The animal is covered with a natural coat of mail—a bony framework, or box, protecting the inward parts, and covered on the outer surface by beautiful horny plates variously arranged. The box or casket thus formed consists of two parts; the upper called the *carapace*, or buckler, which is seen in our engraving; the lower called the *plastron*, or breast-plate. The upper and lower shields are joined

at the sides, leaving a space before and behind for the head, limbs, and tail to come out; and these can generally be drawn back under cover at the will of the animal. As it moves very slowly, and has little or no means of returning any attack of violence or cruelty, this is a most kind provision for its preservation. This animal walks with a shambling, hobbling gait, and seems to make but little way; though with steadiness and perseverance, of which it has been often quoted as an emblem, it is found at last to gain its point.

In the poetical and historical writings of Greece and Rome the Tortoise often appears. In an old fable, Mercury is said to have made the ancient Greek lyre out of the carapace of the Tortoise. A well-cut figure of the animal appears on the old silver coins of Aegina. The name of *Testudo* was given among the Romans to the covering made by a closely compacted body of soldiers, who raised their shields together over their heads, to secure themselves against the darts of the enemy. This *testudo* presented one unbroken surface, of such strength that men could walk upon it, and even horses and chariots be driven over it.

The Tortoise is remarkably tenacious of life, and is famous for longevity. In the Bishop's garden at Peterborough one died in 1821, which must have exceeded 220 years. A Tortoise was placed in the garden at Lambeth, by Archbishop Laud, in 1625. It died in 1753, owing to some neglect of the gardener. A gigantic Tortoise, a native of the Seychelles Islands, was seen by the writer of this in the Gardens of the Zoological Society, Regent's Park. The breadth across the back of that specimen was four feet nine inches; its weight was 285 pounds.

## THE TURTLE.



THE above cut represents the Hawk's-bill Turtle, so called from the resemblance which its horny beak bears to the bill of the hawk. The plates with which this Turtle is covered form the beautiful substance known by the name of Tortoise-shell. There are thirteen of these plates on the back of the animal; they lie one over the other, like the tiles of a house, at least one-third of each plate overlapping the one behind it. The manner in which the tortoise-shell is softened, or polished, and so rendered fit for use and ornament, is very curious, the effects being produced chiefly by means of heat.

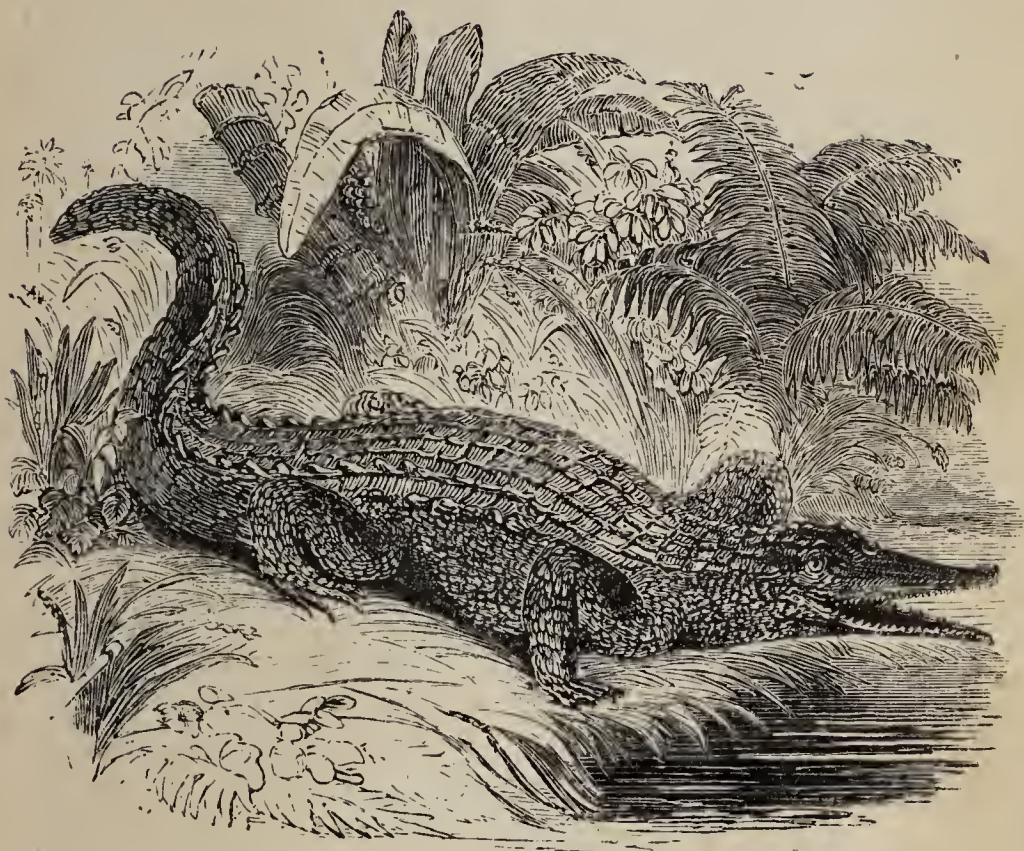
The Hawk's-bill Turtlé is found about the islands

and coasts both of the Indian and Atlantic oceans. Turtle of this species have also been taken on some occasions on the shores of Great Britain. They feed on sea-weed, crabs, and various kinds of shell-fish. When not occupied in feeding, they are often seen floating, without the slightest movement, on the surface of the sea, as if asleep ; they are then easily approached and taken. At other times their progress through the water is exceedingly rapid. The feet, which are formed like oars, propel the animal with great force. "The Green and Hawk's-bill Turtle," says Audubon, "remind you by their celerity, and the ease of their motions, of the progress of a bird in the air."

The young Turtles are hatched from eggs which the female lays in the sand at certain seasons. These eggs are perfectly round, and are much esteemed as articles of food. Audubon says, that the Turtle shows great caution in selecting the spot in which to lay her eggs. Raising her head above the water, on a fine moonlight night, she looks round her, and examines the several objects on the beach. She then utters a loud hissing sound, in order to scare away any enemies. Should she see danger, she sinks below the water ; but if all be safe, she proceeds gently and quickly to form a hole in the sand, which she scoops out with her hind flappers, digging to the depth of eighteen inches, or sometimes more than two feet. "This labour," says our author, "I have seen performed in the short period of nine minutes. The eggs are then dropped, one by one, and disposed in regular layers, to the number of one hundred and fifty, or sometimes nearly two hundred." This operation takes about twenty minutes. She then scrapes the loose sand back over the eggs, and so levels and smooths the surface, that few persons on seeing the spot could imagine that anything had been done to it. This accomplished to her satisfaction, she retreats to the water with all possible despatch, leaving the hatching of the eggs to the heat of the sand.

The Green Turtle is highly valued for its flesh.

## THE CROCODILE.



THE Crocodile is a native of Asia and Africa, and is hatched from an egg. It is one of the animals called amphibious, because it can live either in water or out of it. It is a very fierce and mischievous creature, with rows of sharp teeth, a large mouth, and angry-looking eyes. It is sometimes twenty or thirty feet long, and has a covering of skin like armour over the back, which is so hard that a musket-ball cannot pierce it. The whole animal has the appearance of being covered with curious carved work.

The Crocodile lies waiting quietly by the banks of

rivers in Egypt, and other parts of Africa ; and when it sees a dog, or other animal near enough, it suddenly seizes it, and diving down again into the water, swallows its prey. When it is hungry, it comes up for more food. Sometimes it floats on the top of the water, and takes into its mouth such fishes as come within its reach.

As soon as a young Crocodile escapes from its egg, it makes for the water, but is often eaten up by some bird of prey. The Crocodile's egg, which is not much larger than that of a goose, is considered by some to be good food, and is eaten by many natives of Africa.

As a proof of the low and perverted state of that mind which knows not the true God, or has departed from His truth to follow its own absurd imaginations, it may be mentioned, that in some parts of Egypt the Crocodile was anciently worshipped and adored.

“ The snake-devouring Ibis these enshrine ;  
Those think the Crocodile alone divine.”\*

Bishop Heber describes a large Crocodile which he saw close to his boat, Aug. 16, 1824, and which “ showed himself to the best advantage. Instead of being like those we had seen before, of a black or dusky colour, he was all over stripes of yellow and brownish black, like the body of a wasp, with scales very visibly marked, and a row of small tubercles or prominences along the ridge of his back and tail. He must, I should think, have been about fifteen feet long.”†

### THE LIZARD.

THE common Lizard, or, as it is sometimes called, the nimble Lizard, is the most gentle and inoffensive of all the tribe to which it belongs. As with the rest of

\* Gifford's Juvenal.

..

† Journey in India.

that tribe, its head and body are covered with scales. The tail is generally much longer than the body. Beneath the throat there is a kind of collar, formed of nine plates or scales. The length of the animal is usually from  $5\frac{1}{2}$  to  $6\frac{1}{2}$  inches.

Mr. T. Bell, in his "History of British Reptiles," gives the following graphic account of the Lizard before us :—



"This agile and pretty little creature is the common inhabitant of almost all our heaths and banks in most of the districts of England, and is met with in Scotland ; it is also one of the few reptiles found in Ireland. On the Continent its range does not appear to be very extensive. It is not found in Italy, nor, I believe, in France, and is probably confined, in a great measure, to our own latitude. Its movements are beautifully gracile, as well as rapid ; it comes out of its hiding-

place during the warm parts of the day, from the early spring till autumn has far advanced, basking in the sun, and turning its head with a sudden motion the instant that an insect comes within its view ; and darting like lightning on its prey, it seizes it with its little sharp teeth, and instantly swallows it. Thus it will often take a great many of the smaller insects."

The eggs are not placed in the sand to be hatched by the warmth of the sun, as is the case with the sand-lizard, but the young are produced alive, fully formed, able to run about, and very soon afterwards to take their own food.

The Green Lizard, which differs from the above, is frequently met with on the Continent. Notices of it repeatedly occur in the ancient Roman authors. It is said that when this animal perceives the approach of a serpent, it is extremely agitated, and runs about as if in terror. These natural marks of fear have been considered by some persons as instances of attachment and regard to mankind, as if the little creature meant to warn them of the presence of the venomous reptile.

We again turn to Bishop Heber's delightful book. "August 16, 1824. My cabin was extremely infested with insects this evening, particularly with a large black beetle, which was very beautiful, having a splendid mixture of jet, copper colour, and emerald about it. I had also a pretty green Lizard, which I carefully avoided injuring, knowing it to be an enemy to ants and cockroaches, both of which plagues are increasing, and unfortunately do not now seem to check each other. Yet I was a little perplexed how the 'honest man should have found his way into my closet.' "

## THE BLIND-WORM, OR SLOW-WORM.



THERE is a very common, but mistaken opinion, that the Blind-worm is venomous. The fact is, that there are no poison-fangs in its jaws, and that the teeth are so small as scarcely to leave any mark on the finger by the bite. The name by which this creature is known would lead some persons to suppose it blind ; whereas it has eyes, small indeed, but very bright and quick. "The general colour of the Blind-worm," says Mr. Bell, "is a brownish grey, with a silvery glance." A black line extends down the back. Its length is ten, twelve, or fourteen inches. It feeds upon the little white slugs common in gardens, and on earthworms and insects. It cannot swallow rats or mice, or full-

sized frogs and toads, its jaws having a narrower gape than those of the common snake, vipers, and others of the family of true serpents. Mr. G. Daniel, in Mr. Bennett's edition of White's Selborne, describes the habits of a Blind-worm, which he kept alive for nine weeks. It ate white slugs, and drank sparingly of milk, raising its head while drinking. It avoided water; and was very different, in this respect, from some snakes he had, which coiled themselves in a pan containing water, and appeared to delight in it. The Blind-worm cast its skin while in Mr. Daniel's possession; the skin came off in separate pieces, the largest of which was two inches in length.

This creature, which is also known by the name of the Slow-worm, is capable of enduring a much colder climate than most other reptiles, even of our own country. Mr. Bell, in his "History of British Reptiles," says, "It is found in Russia, Poland, Denmark, Sweden, and Scotland, as well as throughout the most temperate parts of Europe, and as far south as the south of France and Italy; but it has not, I believe, been seen in any part of Africa. It makes its appearance also at an earlier season than any other of our scaled reptiles. It retires in the autumn under decayed wood or leaves, or into soft dry soil, where it is covered with heath or brushwood, and penetrates to a considerable depth in such situations by means of its smooth rounded muzzle and even polished body."

The same agreeable writer informs us of its being so timid that, on being laid hold of or pursued, it contracts itself so forcibly, as to become perfectly stiff; and it is then so fragile as to be easily broken in two either by a blow or an attempt to bend it; hence it acquired the title *fragilis*, which was given to it by Linnæus.

## THE BOA CONSTRICTOR.



THE Boa Constrictor is a tremendous kind of serpent, different species of which are met with in the East Indies, in Africa, and in some parts of South America. This enormous reptile is often found to measure thirty feet in length. Its colour is of a dusky yellow, marked with large brown spots, bordered with black ; the scales are round, small, and smooth. In its native country it lies hidden in thickets, whence it suddenly rushes out, and, erecting its head, attacks its victim. It generally preys upon goats, fowls, and the smaller game ; but, when impelled by hunger, it assails larger and stronger animals. Bishop Heber, in

his Journey in India, speaking of these enormous snakes, says, " Many stories are told here, as in Surinam, of persons stepping on them by mistake for fallen trees, and being terrified on finding them alive."

One of these creatures, it is said, had been waiting for some time near the brink of a pool, in expectation of its prey, when a buffalo approached, unconscious of the presence of so terrible an enemy. The serpent having darted upon the poor animal, began to wrap it round in its folds ; and at every turn, the bones of the buffalo were heard to crack. Unable to escape, it struggled and roared, but could not get free, till, its bones being crushed to pieces, and the whole body reduced to a mere mass, the serpent untwined itself in order to swallow it at leisure. To do this the more easily, it licked the body all over. It then gradually swallowed it at one morsel, the buffalo being three times as thick as itself.

The bite of the Boa Constrictor is not venomous ; but the snake is scarcely less mischievous on this account, so great are its cunning, boldness, and strength. There was, in 1844, one of them in the gardens of the Surrey Zoological Society, which some time previous attacked its keeper, coiling itself about him. Had it not been for timely and powerful aid, on his calling for help, he would most probably soon have been killed.

Mr. A. Cops, formerly keeper of the lions in the Tower of London, was, about the year 1825, attacked by a Boa Constrictor, to which he was offering a fowl. The snake, which was almost blind, being at that time about to change its skin, missing the fowl, seized the keeper's thumb instead, round which it at once threw its coils. It then instantly cast an additional fold round the man's neck, and fixed itself by its tail to one of the posts of its cage in such a manner as nearly to throttle him. His own exertions, however, aided by those of the under-keeper, at length disengaged him from his dreadful situation. So determined was the attack of

the animal that it could not be compelled to relinquish its hold until two of its teeth had been broken off, which were left in the thumb.

---

### THE COMMON SNAKE.



THERE are many species of this reptile. They are very common in England, and are to be found in most of the countries of Europe. The Snake represented above is perfectly free from any poisonous quality. It is generally from three to four feet in length. It lives in our woods, heaths, and hedgerows, especially near water, and feeds upon young birds, eggs, mice, &c.; but

chiefly upon frogs. It generally seizes the frog by the hind leg, and then, by degrees, swallows it whole.

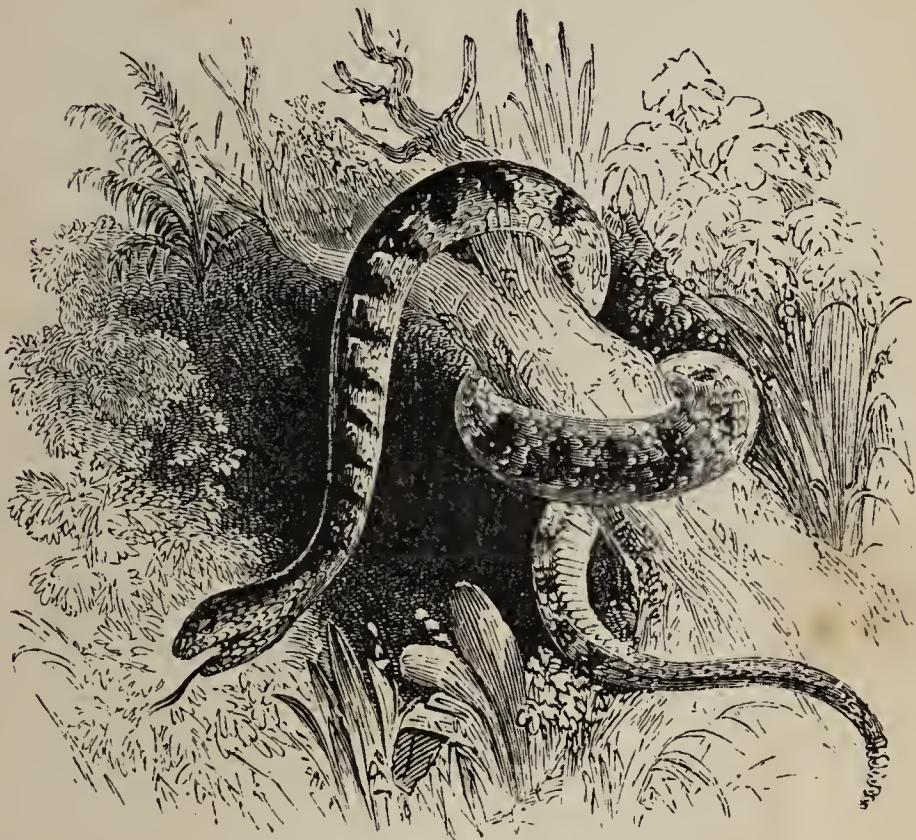
Professor Bell says : " I have seen one of these voracious creatures in pursuit of a frog, which appeared perfectly conscious of its approaching fate, leaping with less and less power, as it found its situation more alarming, and uttering its peculiar weak cry with more than usual shrillness, until at length it was seized by its pursuer by the hinder leg, and gradually devoured. The frog is generally alive not only during the process of deglutition, but even after it has passed into the stomach. I once saw a very small one, which had been swallowed by a large snake in my possession, leap out of the mouth of the creature, which happened to gape, as snakes frequently do immediately after taking food. And on another occasion I heard a frog distinctly utter its peculiar cry several minutes after it had been swallowed by the Snake."

He adds, " The common Snake is easily tamed, and may be made to distinguish those who caress and feed it. I had one which knew me from all other persons ; and when let out of his box would immediately come to me, and crawl under the sleeve of my coat, where he was fond of lying perfectly still, and enjoying the warmth. He would come to my hand for a draught of milk every morning at breakfast, which he always did of his own accord : but he would fly from strangers, and hiss if they meddled with him."

We ought to be very thankful to God, that this country is so free from poisonous reptiles, and other noxious animals, as it happily is. There are nations whose inhabitants are constantly obliged to take measures for protecting themselves against such annoyances.

Derham remarks of the venomous tribes, that their poison is doubtless of some great and especial use to themselves, for the more easy conquest and sure capture of their prey. He also suggests that it may help the digestion of their food.

## THE RATTLE-SNAKE.



THIS poisonous reptile is found on the continent of America. Its venom is said to be more virulent than that of any creature of the same class ; but happily it seldom employs its fatal power, except when induced by hunger, or for the purpose of self-preservation. It is extremely sluggish, and generally avoids the sight of man. The poison is inserted into the body of its victim by means of two long, sharp-pointed teeth or fangs, which grow one on each side of the upper jaw. The root of each fang rests on a kind of bag, containing a certain quantity of liquid poison, of a yellow colour ; and when the snake bites, a portion of this fluid is forced through an opening in the tooth, and lodged at

the bottom of the wound. Another peculiarity of the poison-teeth is, that, when not in use, they turn back, as it were, upon a hinge, and lie flat on the roof of the animal's mouth.

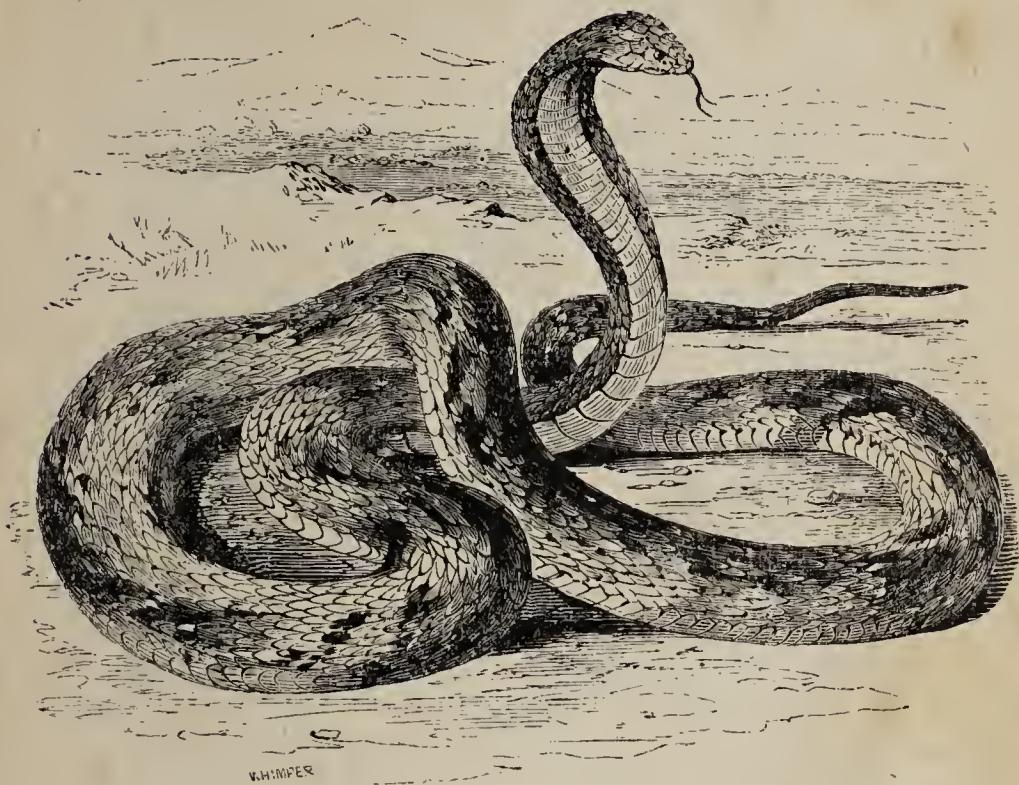
Some persons have imagined that the Rattle-snake has the power of fascinating its prey. The idea probably arose from the circumstance of the smaller animals, on which this snake subsists, becoming so terrified at the sight of their frightful enemy, as to lose their self-possession when in its presence.

Its name is given to it on account of the curious apparatus with which its tail is furnished. This consists of a series of hollow, horn-like substances, placed loosely one against the other, in such a manner as to produce a rattling noise when the tail is shaken ; and as the animal, when intending an attack, gives a tremulous action to the tail, timely notice is afforded of the threatened danger. It is said that the number of pieces of which this rattle is formed, indicates the age of the snake, as a fresh portion grows every year.

The mechanism of the jaw of most serpents is very wonderful, allowing them, from its vast power of expansion, to swallow animals of great comparative size. Like all other creatures which swallow their prey whole, the teeth appear to be formed chiefly for preventing its escape, and not for purposes of mastication.

The effect of music on snakes has been often observed. Viscount Chateaubriand relates, that, in July, 1791, in Upper Canada, he saw a native appease the anger of a Rattle-snake, and even cause it to follow him, by the music of his flute.

## THE EGYPTIAN COBRA.



THE reader has probably observed, in front of the head-ornaments of the granite deities and kings of Egypt, in the British Museum, and elsewhere, the figure of a snake. This animal was much honoured by the Egyptians, and was represented as one of the marks of regal dignity. Cuvier says of the Cobra, that its habit of elevating itself, when approached, led these people to believe that it was the guardian of the plains which it inhabited ; and they adopted it as the protecting deity of the world. They sculptured it on all the portals of their temples, one serpent on each side of a globe. The Cobra of India is also an object of superstitious veneration. “The natives of Ceylon,” says Dr. Davy, “conceive that it belongs to another world, and that when it appears in this it is merely as a visitor ; that it possesses great power, somewhat akin to the gods.’ In

consequence, they superstitiously refrain from killing it, and always avoid it if possible."

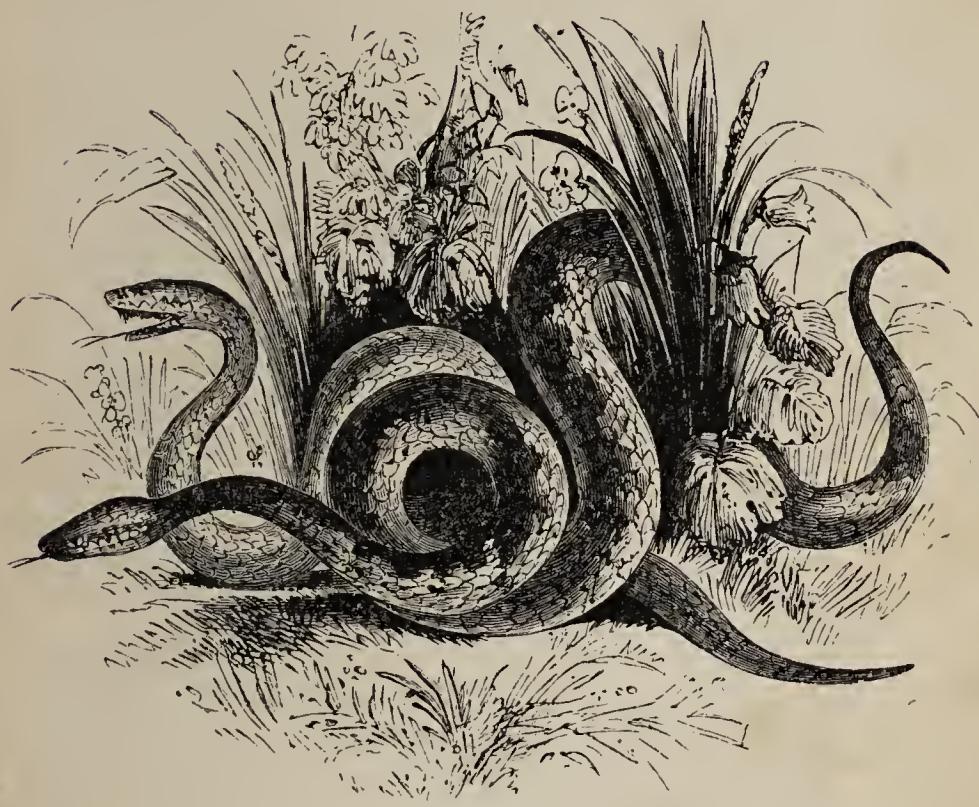
Mrs. Deane, in her tour through the Upper Provinces of Hindostan, was one day reading in a bungalow at Meerut, when, in the verandah, she saw a Cobra advancing towards her. Starting from her seat in terror, she called to one of the native servants, who was looking on, to kill the snake. This he was most unwilling to do, till, again ordered, and even entreated, he approached the formidable intruder, made a profound *Salaam*, (or bow of respect,) and muttering to it *Maaf Kurro*, (*Forgive!*) knocked it on the head with a stick, and killed it.

Well might the lady have been alarmed ; for the Cobra is an exceedingly venomous creature. The poison is contained in glands which lie at the root of the fangs of the teeth. A Cobra in the Gardens of the Zoological Society killed its keeper. It is said that the man was intoxicated when he took it out, and placed its head inside his waistcoat. The reptile at first seemed to be in good humour, and wound itself, as if playfully, about him ; but the man squeezed its tail, when it suddenly struck at him, and bit him between the eyes. In twenty minutes he became insensible ; and in less than three hours he was dead.

Dr. Livingstone, in his travels in South Africa, met with Cobras of several colours and varieties. When annoyed, they raise their heads up about a foot from the ground, and flatten the neck in a threatening manner, darting out the tongue, and retracting it with great velocity ; while their fixed glassy eyes glare, as if in anger.

The Cobra is much moved by music, which seems to fascinate the animal ; hence the influence exerted upon it by professed snake-charmers.

## THE COMMON VIPER.



J. H. DODD P

THE Common Viper is the only poisonous reptile which is a native of this country. It is often known by the name of the Adder, and is found in sandy heaths, among dry woods, on banks, and in waste stony places. In Scotland it is met with more frequently than the common snake. In Ireland it has never been seen. It is found on the continent of Europe, from the northern part of Russia to the south of Italy and Spain.

It is naturally feared on account of its venom, which, by the pressure of its tooth, it drops into the wound it has made. The bite and the insertion of the venom are the work of an instant, producing severe symptoms, and sometimes death itself in warmer climates. "In

this country," says Professor Bell, "I have never seen a case which ended in death. At the same time the symptoms are frequently so threatening, that I cannot but conclude that, in very hot weather, and when not only the reptile is in full activity and power, but the constitution of the victim is in a state of great irritability and diminished power, a bite from the common Viper would very probably prove fatal." The remedies usually employed for this injury are the outward application of sweet oil, and ammonia taken in proper quantities inwardly.

The Viper feeds on field-mice, shrews, frogs, and small birds. It is very greedy, and sometimes takes into its mouth more than it can swallow. One was found on Poole Heath, Dorsetshire, in a dying state, from having endeavoured to swallow a mouse which was too large for it ; the skin of the Viper's neck was overstretched, and had burst in several places.

The Viper, like many other venomous serpents, is born alive. As soon as it is born it begins to crawl about, and immediately shows its mischievous nature, the little reptile being easily enraged, and putting itself at once into a posture of defence.

The Psalmist, in describing the nature of the wicked, says : "Their poison is like the poison of a serpent ; they are like the deaf adder that stoppeth her ear ; which will not hearken to the voice of charmers, charming never so wisely."\*

The Messiah's complete victory over our spiritual enemies seems to be predicted in another Psalm : "Thou shalt go upon the lion and adder ; the young lion and the dragon shalt Thou tread under Thy feet."†

\* Psalm lviii. 4, 5.      † Psalm xci. 13. See Bishop Horne's Commentary.

## THE FROG.



THIS harmless and useful animal is found in almost all parts of the kingdom. Wherever there is a river, or a pond, Frogs are to be met with ; and, when numbers of them are collected together, their croaking may often be heard from a great distance. They are most noisy in the season of spring, when they begin again an active life, having passed the winter months in a state of torpor, without moving or feeding. Their winter retreat is generally the mud at the bottom of the water, where they are preserved in a nearly equal temperature, though at a low degree, and are secured from external injury. Here they collect in multitudes, appearing almost as one mass. After their long sleep they feed very heartily.

Their food consists of various kinds of insects, and of small slugs, which they swallow whole. Mr. Bell says,

"The manner in which the Frog takes its food is very interesting. As in the toad, the tongue is doubled back upon itself when at rest, and having a viscous secretion at the extremity, it is suddenly thrown forward upon the insect, which being caught by the adhesive matter upon it, is instantly drawn into the mouth by the sudden return of the tongue to its former position. This is but the work of an instant, and, indeed, is performed with such rapidity as scarcely to be detected without careful watching." Thus the Frog is a valuable aid to the gardener and farmer.

Mr. Bell, in his notice of the Frog, calls attention to the changes which its colour undergoes from various causes ; such as the presence or absence of light, the influence of fear, &c.

Bishop Heber, writing in Calcutta, in June, 1824, says : "The gardens, fields, and ditches (and the ground-floors of some of the houses, too), swarm with the largest and noisiest Frogs I ever saw or heard. One of these Frogs I saw, about as large, I think, as a good-sized gosling, and very beautiful ; being green, speckled with black, and almost transparent."

This little reptile may be tamed. Dr. W. Roots had one in a domestic state, which "partook of the food given it by the servants. During the winter seasons, he regularly came out of his hole in the evening, and made for the hearth in front of a good kitchen fire, where he would continue to bask, and enjoy himself, till the family retired to rest. A sort of intimacy existed between him and a favourite old cat, under whose warm fur the Frog frequently nestled, whilst the cat appeared extremely jealous of interrupting the comforts and convenience of the Frog. This curious scene was often witnessed by many besides the family."

One of the plagues which visited Egypt, on account of Pharaoh's wickedness, consisted of vast quantities of Frogs, which covered the land.\*

\* Exodus viii. 6.

## THE TOAD.



THIS reptile generally measures about four inches in length, and has an unsightly appearance. Though not unlike the frog in its form and some of its habits, it is less active, and is not so fond of the water. Instead of leaping nimbly like the frog, it crawls slowly about; so slowly, indeed, that, when attacked by cruel men or boys, it has but little chance of escape. One reason for its being disliked is, that it is considered by many persons to be offensive and venomous; whereas, it is not only harmless, but useful, and has been known to become attached to those who treat it with kindness. Its use consists in clearing away from the vegetation insects and worms, which it seizes in a very curious manner.

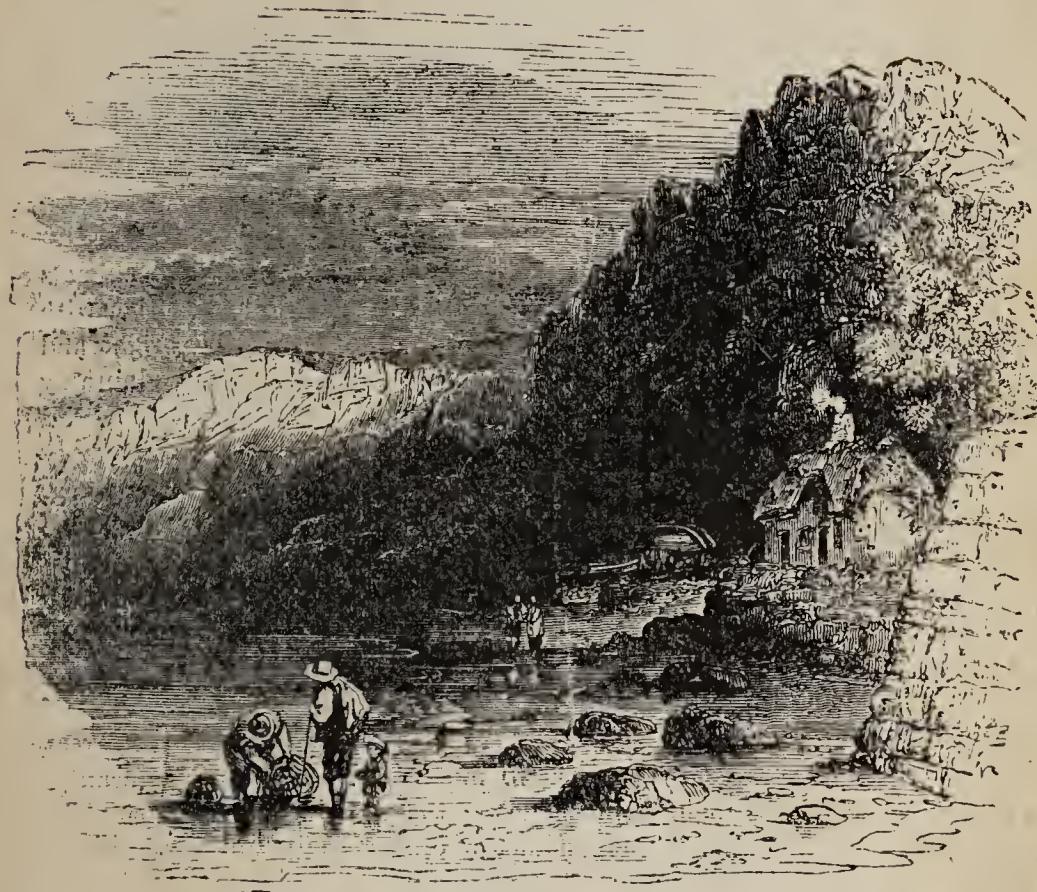
When about to feed, the Toad remains motionless, with its eyes turned directly forwards upon the object, and the head a little inclined towards it ; in this attitude it remains till the insect moves, when, by a stroke like lightning, the tongue is thrown out upon the victim, which is instantly drawn into the mouth.

The Toad may be so tamed as to suffer itself to be taken up in a person's hand and carried about the room to catch flies that alight on the walls. Pennant mentions one that had become accustomed to be fed in this manner, having frequented the same place for thirty-six years ; namely, a small opening under the steps of the hall-door of a gentleman's house in Devonshire. It would come out of its hole in an evening when a candle was brought, and, on being carried into the house, would take its meal in the presence of persons who came to see it fed. After having been kept so long, it was at length destroyed by a tame raven, which, seeing it at the mouth of its hiding-place, pulled it out, and so wounded it that it died.

During the winter months the Toad continues in a torpid state, retreating to the cleft of a rock, or to some hollow in the root of a tree, or among the mud at the bottom of a ditch. It is very long lived, and not easily killed. Stories are told of Toads having been found alive inclosed in blocks of stone and marble, and in the trunks of trees, where it is conjectured they must have lain for centuries. Mr. Bell, a close observer of the ways of animals, remarks, that to believe these accounts "is a demand upon our credulity which few would be ready to answer."

This animal is sometimes called ugly ; but Sir Thomas Brown has this remark,—"I hold there is a general beauty in the works of GOD ;" and he adds, that he knows not by what logic we call a Toad ugly.

## FISHES.



"THE waters themselves are an admirable work of God, and of infinite use to that part of the globe already surveyed. And the prodigious variety and multitudes of curious and wonderful things observable in its inhabitants of all sorts, are an inexhaustible scene of the Creator's wisdom and power. The vast bulk of some, and prodigious minuteness of others, together with the incomparable contrivance and structure of the bodies of all ; the provisions and supplies of food afforded to such an innumerable company of eaters, and that in an element unlikely, one would think, to afford any great store of supplies ; the business of respiration, performed in a way so different from, but equivalent to, what is in land-animals ; the adjustment of the organs of vision to that element in which the animal liveth ; the poise, the support, the motion of the body forwards with great swiftness, and upwards and downwards with great readiness and agility, and all without feet and hands ; and ten thousand things besides ;—all these things, I say, do lay before us a various, glorious, and withal inexhaustible scene of the Divine power, wisdom, and goodness."—DERHAM'S *Physico-Theology*.

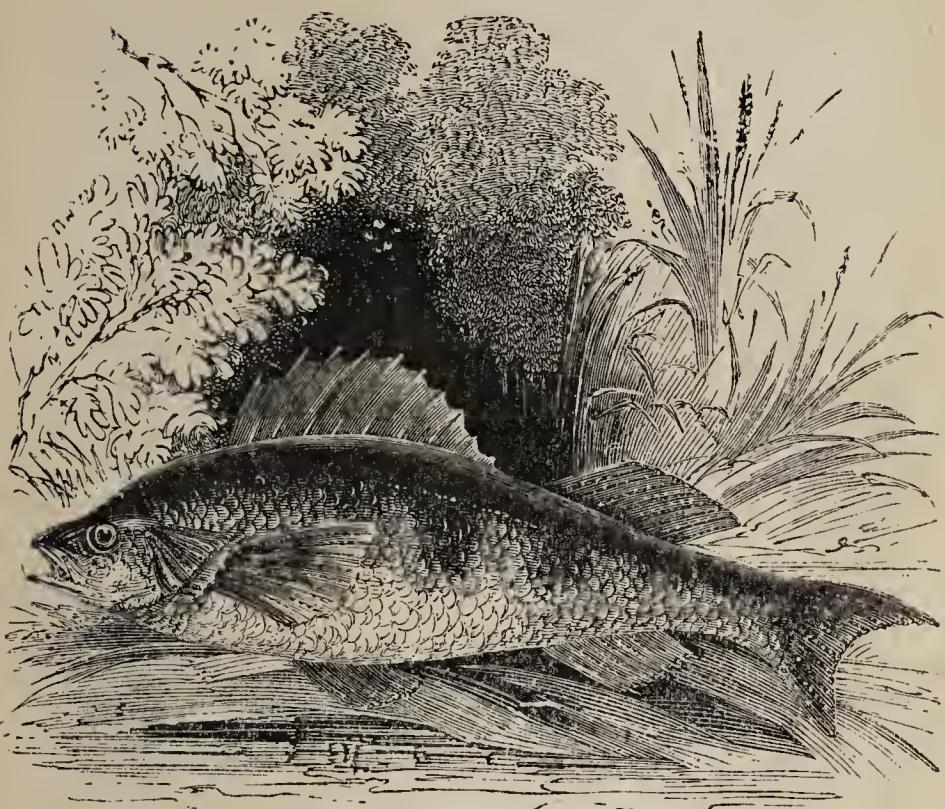
## FISHES.

---

"Tenants of the waters of our globe, the organization of these animals expressly fits them for their liquid element. They are clothed neither with hair nor feathers, but with smooth scales, often beautifully bright and delicate, giving uniformity of surface to a compact contour, admirably adapted for progress through the waters. Some, it is true, have a hard osseous envelope, as the Ostraceans ; and others are arrayed in a panoply of spines, as the Tetraodons, and Diodons, which remind us of the hedgehog. There are some, also, as the Eel, the Cod-fish, Shark, &c., which have the skin naked, smooth, and slippery. As is the case with terrestrial animals, they vary in their habits and powers of locomotion. Some move slowly along, others cleave the waves with the velocity of an arrow, bear up the rapids, and clear the falls with wonderful energy.

"The study of fishes is not only very interesting, but very important. Of all the classes of vertebrate animals, there is not one which affords so great a number of species useful as food to man. Nor is the supply scanty, they are drawn by millions from the deep ; the work of the fisheries gives employment to thousands ; the amount of property involved is enormous : and for the promotion and protection of this branch of traffic, legal enactments have been enforced, and societies incorporated."—*Pictorial Museum of Animated Nature*.

## THE PERCH.



THERE is scarcely a river or lake of any extent in this country in which the Perch is not found in abundance. It occurs in Ireland, in most of the lakes in Scotland, in those of the North of England, and also in Wales. In rivers, it prefers the sides and eddies of the stream to the rapid parts of the current, and feeds upon insects, worms, and various small fish. In ponds and fish-pools, the Perch will congregate round stakes, piles, or any wood-work under water.

Perch are very bold and voracious. Mr. Jesse tells us, that in a few days after some had been laced in a pond in Bushy Park, they came freely and took from his hand worms which he held out to them. The flesh of this fish is firm compared with that of small fish in

general, white, and of good flavour, and is much esteemed by the Dutch when served up as *water-souchy*.

A Perch of three pounds' weight is considered a fish of large size. Perch have, however, been taken weighing four pounds each, from the ponds in Richmond Park. One was taken from the Birmingham Canal, weighing six pounds. Others of even greater size are stated to have been caught; and Pennant records his having heard of one that was taken in the Serpentine River, Hyde Park, that weighed nine pounds.

The Perch, though very common, is one of the most beautiful of our fresh-water fish; its form being elegant, and its colours brilliant and striking. The upper part of the body is a rich greenish brown, passing into golden yellowish white below; the sides ornamented with from five to seven dark transverse bands.

Izaak Walton says, "The Perch is a very good, and a very bold biting fish; he is one of the fishes of prey, that, like the Pike and Trout, carries his teeth in his mouth, which is very large; and he dare venture to kill and devour several other kinds of fish. He has a hooked or hog-back, which is armed with sharp and stiff bristles, and all his skin armed or covered over with thick, dry, hard scales; and he hath, which few other fish have, two fins on his back. He is so bold that he will invade one of his own kind."

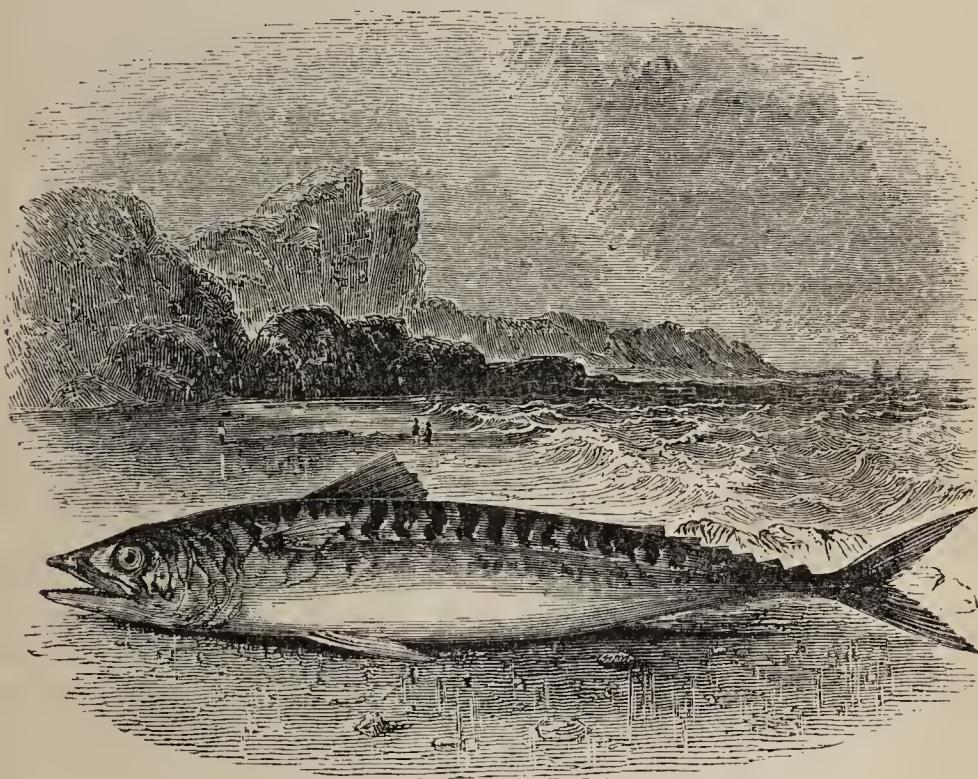
It has been sometimes said that the Pike will not attack this fish, for fear of its thorny spikes, which it raises on the approach of danger. Though this may be true with regard to large Perch, it is well known that the Pike will devour the smaller ones.

---

## THE MACKEREL.

THE Mackerel has been supposed by some writers on Natural History to be a fish of passage, and to make long voyages, northward or southward, according to the

season. But this seems to be a mistake. The Mackerel is now found, on some parts of our own coast, in every month of the year, and is much prized for the table. It approaches nearer to the shore at certain times than at others; and this law of its nature enables man to take it in vast numbers. If Mackerel always remained in the deeper parts of the sea, little could be done in fishing



for them: but roving along the shore, as they do, in large shoals, millions are caught, which yet form but a small portion compared with the tens of millions that escape the net or the line.

Mr. Yarrell, in his History of British Fishes, says that the most common mode of fishing for Mackerel, and the way in which the greatest numbers are taken, is by drift-nets. Twelve, fifteen, and sometimes eighteen of these nets, twenty feet deep by one hundred and twenty feet long, are attached lengthways to a thick

rope, called the drift-rope. When arranged for depositing in the sea, a large buoy, to which the end of the drift-rope is fastened, is thrown overboard; and as the vessel sails before the wind, this rope, with the nets attached, is passed over the stern into the water, till the whole of the nets are run out, sometimes to the distance of a mile, or more. The drift-rope is then shifted from the stern to the bow of the vessel, which pulling upon the rope keeps the net straight and suspended in the water. This is generally in the evening. The fish, roving in the dark through the water, hang in the meshes of the net, which are large enough to admit them beyond the gill-covers and pectoral fins, but not large enough to allow the thick part of the body to pass through. In the morning early the nets are hauled in, and the fish secured.

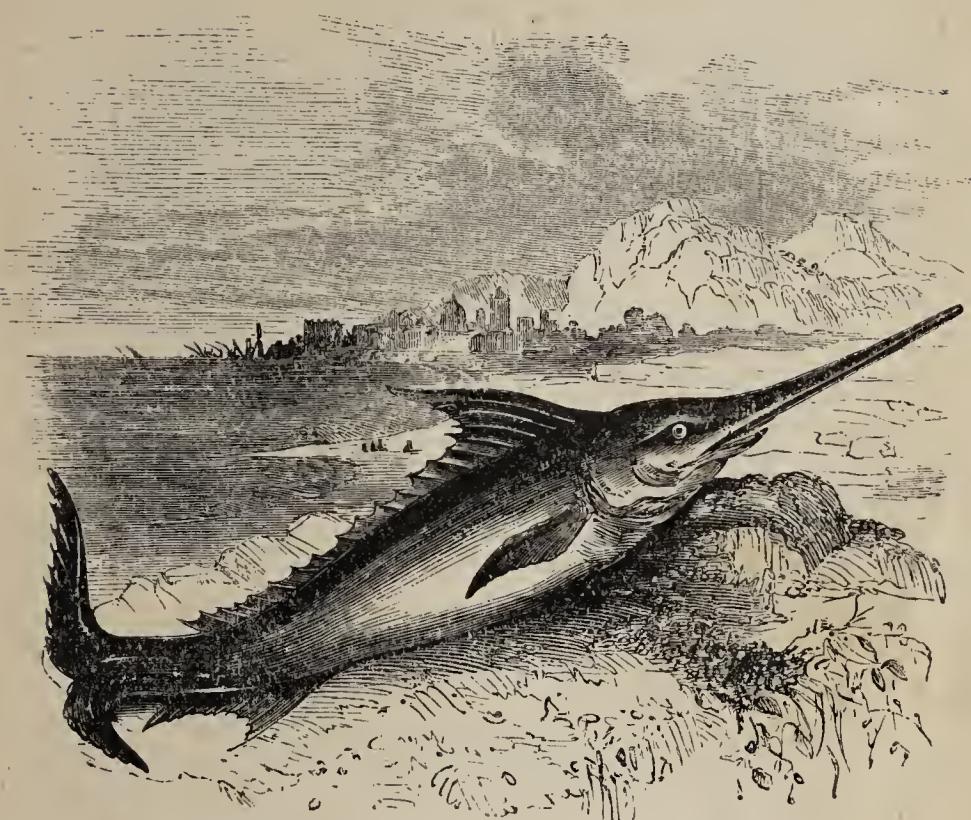
Many Mackerel are caught by the hook and line. They will take various kinds of bait; but the usual bait is a portion of the tail of the Mackerel, or a piece of red cloth.

In May, 1807, the first Brighton boat-load of Mackerel sold at the rate of seven shillings each fish. In 1808, they were sold at Dover at sixty fish for a shilling!

Large quantities of this valuable fish are salted in France; and some are preserved in this way for consumption in Cornwall.

The general size and flavour, as well as the bright and beautiful colours, of the Mackerel are too well known to need a description. The hues are extremely rich and vivid when the fish is first drawn out of the water; and its flavour is excellent in proportion to its freshness. The Mackerel feeds on small fish. Young Mackerel are called Shiners.

## THE SWORD-FISH.



THERE are two species of this creature, the Broad-finned and the European Sword-Fish. The former of these inhabits the Brazilian and East Indian seas, and the Northern Ocean. In its terrible weapon, from which it derives its name, as well as in its general habits, it is like the European Sword-Fish, which is found in the Mediterranean, and which has occasionally been met with on the British coasts. Daniell, in his *Rural Sports*, states that "in the Severn, near Worcester, a man bathing was struck, and actually received his death-wound from a Sword-Fish. The fish was caught immediately afterwards, so that the fact was ascertained beyond a doubt."

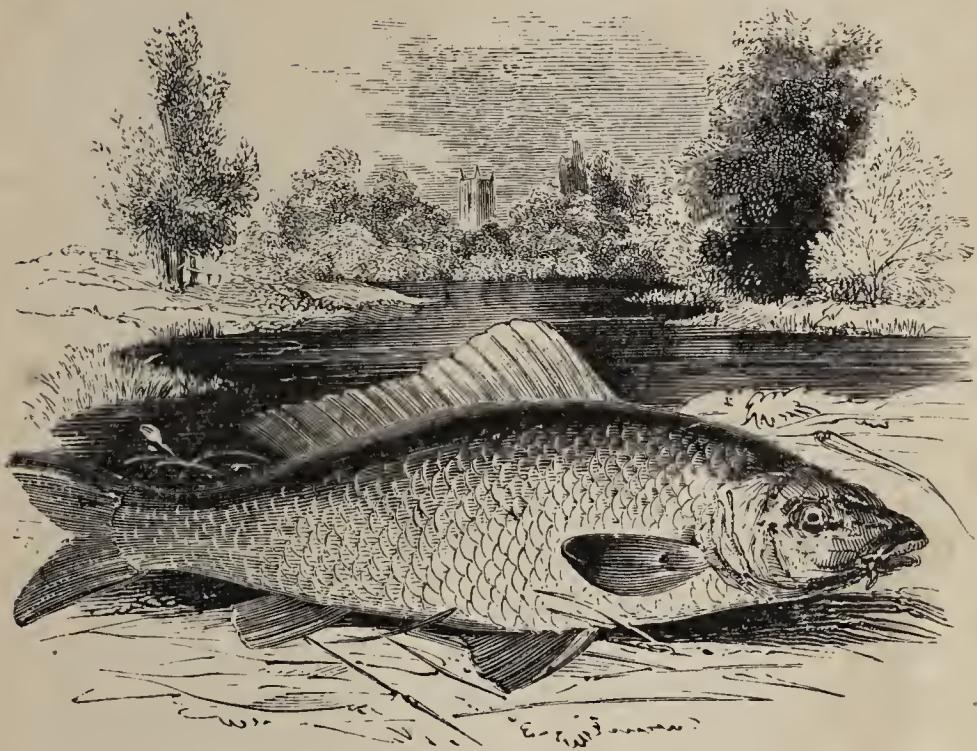
The Sword-Fish is a large and powerful creature,

sometimes weighing a hundred pounds and more. It will attack almost any living thing that happens to fall in its way, with the formidable weapon, of the substance of bone, which extends like a sword from its upper jaw. The Sword-Fish and whale are said often to come to battle; and the only resource which the whale has against his enemy is to dive to the bottom, in order to protect the under part of his body, or else to take to flight.

The force with which the Sword-Fish makes its assault is astonishing. In 1725, when His Majesty's ship Leopard, after her return from the coast of Guinea and the West Indies, was refitted for the channel service, in stripping off her sheathing, the shipwrights found in the lower part of the vessel a portion of the sword or snout of one of these fish. On the outside this was rough, and not unlike seal-skin; the broken end appeared like coarse ivory. The weapon pointed from the ship's stern towards the head; the fish must therefore have followed and overtaken the ship while sailing. It had penetrated the sheathing, an inch thick, passed through the planking, three inches thick, and beyond that four inches into the timber. The workmen declared that, with a hammer of a quarter of a hundred weight, it would have required nine blows to drive in a substance of the same kind, although the fish had effected it by a single thrust.

The captain of an East Indiaman, in a letter to Sir Joseph Banks, gives an account of a similar attack upon his own ship; in this case the whole length of the sword was imbedded in the timber. A part of the bottom of the vessel, with the sword fixed in it, was deposited in the British Museum.

## THE COMMON CARP.



“THE Carp,” says Izaak Walton, in his own quaint language, “is the queen of rivers : a stately, a good, and a very subtle fish, that was not at first bred, nor hath been long, in England, but is now naturalized.”

It is not known when Carp were first brought into England. They are mentioned in the “Boke of St. Alban’s,” which was printed by Wynkyn de Worde in 1496. The old couplet is certainly incorrect, which says,

“Turkeys, Carps, Hops, Pickerell, and Beer,  
Came into England all in one year;”

as both turkeys and hops were unknown till upwards of twenty years after the date above mentioned.

In this country, the Carp inhabits ponds, lakes, and rivers: preferring, in the lakes, those parts where the current is not strong, and thriving best where the ground is soft and marly. They probably eat scarcely

anything in winter, and are supposed to bury themselves in mud. White, in his Natural History of Selborne, says : "In the garden of the Black Bear Inn, Reading, is a stream or canal running under the stables and out into the fields on the other side of the road. In this water are many Carps, which lie rolling about in sight, being fed by travellers, who amuse themselves by tossing them bread; but as soon as the weather grows at all severe, these fishes are no longer seen, because they retire under the stables, where they remain till the return of spring."

Mr. Jesse says of some Carp and tench, which were kept by him in a small piece of water, "They were soon reconciled to their situation, and ate boiled potatoes in considerable quantities; and the Carp seemed to have lost their original shyness, eating in my presence."

It is said to be a practice in Holland to keep Carp alive for three or four weeks, by hanging them in a cool place with wet moss in a net, and feeding them with bread soaked in milk.

Carp are in season from October to April; and, as Mr. Yarrell remarks, "they are greatly indebted to the cook for the estimation in which they are held." Izaak Walton says, "I will tell you how to make this Carp, that is so curious to be caught, so curious a dish of meat as shall make him worth all your labour and patience." He then goes on to give a receipt, in which pickled oysters, anchovies, and onions concur with the rinds of oranges and lemons, sweet herbs, and plenty of spiced claret, in making a savoury "broth!" He adds, "Set it on a quick fire till it be sufficiently boiled; then take out the Carp, and lay it with the broth into the dish, and pour upon it a quarter of a pound of the best fresh butter, melted and beaten with half a dozen spoonfuls of the broth, the yolks of two or three eggs, and some of the herbs shred. Garnish your dish with lemons, and so serve it up; and much good do you!"

## THE PIKE.



THIS well-known fish, which is now common throughout Europe, was some centuries ago very rare in England. Edward the First, who regulated the prices of fish which were then brought to market, fixed the value of Pike at a higher rate than fresh salmon, and more than ten times as high as the finest turbot or cod. Pike are frequently specified among the dainties served up at great feasts subsequently to that date. They were so much esteemed in the reign of Henry the Eighth, that a large one sold for double the price of a house-lamb in February, and a small Pike for more than a fat capon.

The Pike is strong, fierce, and active ; swims swiftly, and occasionally darts along with amazing velocity. Its growth, when it is well supplied with food, is extremely rapid ; and, as the digestion is quick, and the appetite almost insatiable, it is an expensive fish to maintain.

The voracity of the Pike is proverbial. It is the master

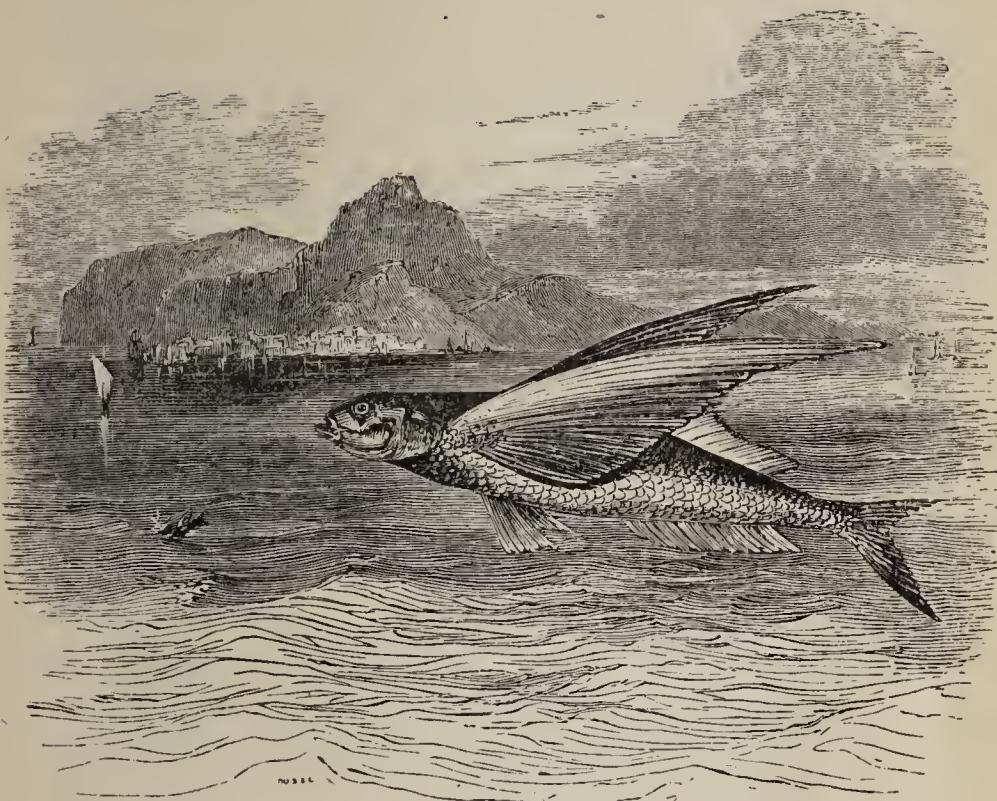
of all the fresh-water streams, and is fond of ascending the feeders of rivers to prey upon the young trout and other fry which usually swarm in such tributaries. They feed upon roach, gudgeon, and such fish as they can swallow ; and if these fail, they will eat any small prey they may meet with, whether alive or dead. Eight Pike, of about five pounds weight each, consumed nearly eight hundred gudgeons in three weeks. “The appetite of one of these Pike,” says Mr. Jesse, “was almost insatiable. One morning I threw to him, one after another, five roach, each about four inches in length ; he swallowed four of them, and kept the fifth in his mouth for about a quarter of an hour, when it also disappeared.”

Mr. Yarrell records an instance of a Pike seizing the head of a swan when she put her head under water ; the fish gorged so much of it that both bird and fish were killed. A mule on being brought to water was caught by the lips by a hungry Pike, which was thus drawn out of the water before it could disengage itself. A woman, while washing clothes in a pond, had her foot bitten by one ; and they have sometimes darted at men’s hands held over the side of a boat.

Pliny considered the Pike likely to attain a longer life, and a larger size, than any fresh-water fish. Gesner says that, in the year 1497, a Pike was taken at Hail-brun, in Suabia, with a brazen ring attached to it, on which was an inscription in Greek to the following effect : “I am the fish which was first put into this lake by the hands of the governor of the universe, Frederick the Second, October 5, 1230.” This makes the fish 267 years old : it is said to have weighed 350 pounds.

The lakes of Ireland and Scotland afford large Pike, the former having produced some of seventy pounds : but Izaak Walton tells us, that “such old or very great Pikes have more in them of state than goodness ; the smaller or middle-sized Pikes being by the most and choicest palates observed to be the best meat.”

## THE FLYING FISH.



THERE are several instances of a kind of Flying Fish, having been found on different parts of the British coast. A shoal of them was seen in August, 1825, off Portland, taking long and frequent flights, as if pursued by some of their enemies of the deep. One which threw itself on the shore of Helford river, near Falmouth, measured sixteen inches in length ; the pectoral fins of this fish, which are its supports in the air, were eight inches and a half long.

This remarkable animal chiefly inhabits the seas of hot climates, and is found in great numbers in New South Wales. Pennant states, that the Flying Fish, in its own element, is perpetually harassed by the dorados and other fish of prey. It endeavours to avoid them by having recourse to the air, but, as it can maintain its

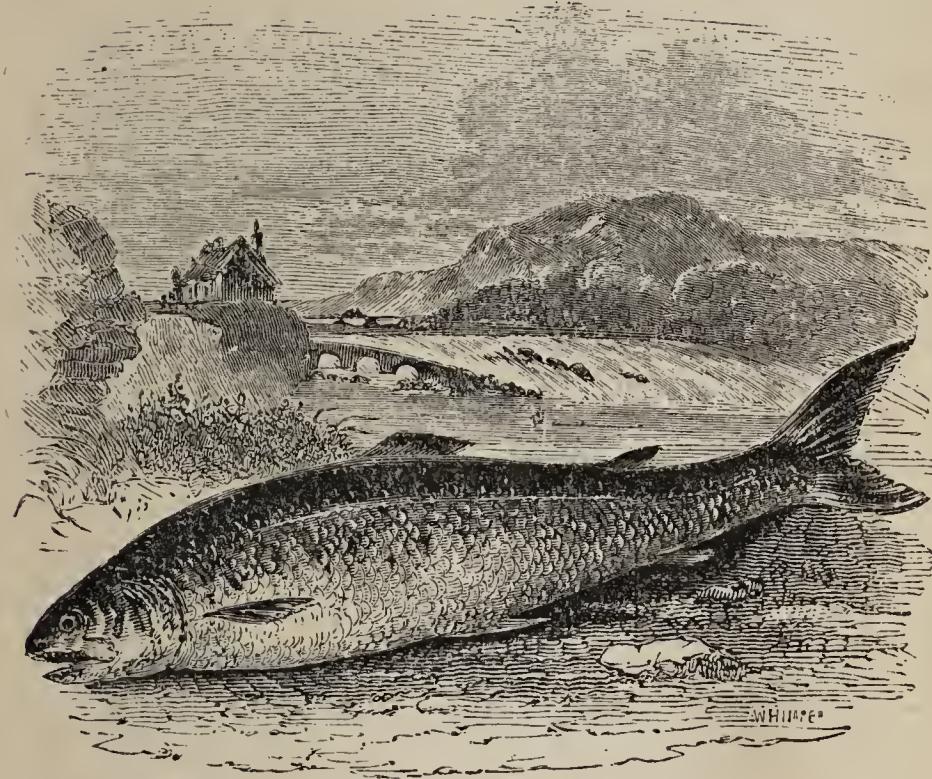
flight but a very short time, it is forced down again into the mouth of the fish which follows in its track. Shoals of Flying Fish sometimes fall on board vessels. The usual height to which they ascend above the surface of the water is about two or three feet, but they sometimes rise fifteen or eighteen feet high. Their flesh is well-flavoured, and is eaten by sailors on long voyages.

The excellent John Ray, at the conclusion of the following fine passage in his “Wisdom of God manifested in the Works of the Creation,” appears to advert to the fish before us. He is speaking of the *multitude* of God’s works, and His *wisdom* in creating them.

“ What can we infer from all this ? If the number of creatures be so exceeding great, how great, nay, immense, must be the power and wisdom of Him who formed them all ! For (that I may borrow the words of a noble and excellent author), as it argues and manifests more skill by far in an artificer to be able to frame both clocks and watches, and pumps and mills, and granados and rockets, than he could display in making but one of those sorts of engines ; so the Almighty discovers more of His wisdom in forming such a vast multitude of different sorts of creatures, and all with admirable and irreprovable art, than if He had created but a few ; for this declares the greatness and unbounded capacity of His understanding.

“ Again, the same superiority of knowledge would be displayed by contriving engines of the same kind, or for the same purposes, after different fashions, as the moving of clocks, or other engines, by springs instead of weights ; so the infinitely wise Creator hath shown in many instances that He is not confined to one only instrument for the working one effect, but can perform the same thing by divers means. So, though feathers seem necessary for flying, yet hath He enabled several creatures to fly without them, as two sorts of fishes, one sort of lizard, and the bat, not to mention the numerous tribes of flying insects.”

## THE SALMON.



“THE Salmon,” says Izaak Walton, “is accounted the king of fresh-water fish, and is ever bred in rivers relating to the sea, yet so high or far from it as admits of no tincture of salt or brackishness.”

The Salmon, however, may be said to inhabit both fresh and salt water, and as one has wittily observed, “he has, like some persons of honour and riches, which have both their winter and summer houses, the fresh rivers for summer, and the salt water for winter, to spend his life in.”

These valuable fish quit the sea at certain seasons, and proceed up the rivers in the spring or summer months, sometimes for hundreds of miles. In thus ascending a stream, particularly as the season advances,

their progress is not easily stopped. They will throw themselves up heights many yards above the level of the water ; and when they have missed their aim, and perhaps hurt themselves in the attempt, they make new efforts. Where the water is low, or sand-banks oppose them, they place themselves on one side, and, in that position, work themselves over into deep water beyond. It is in falling back, however, that the fish are frequently taken by the inhabitants, who place baskets near the edge of the pool for the purpose of catching them. This custom prevails in Ireland and Scotland.

Mr. Mudie, in the British Naturalist, describes the pool below the Fall of Kilmorac, on the Beauly, in Inverness-shire, as thronged with Salmon, which are continually attempting, but in vain, to pass the fall. They often kill themselves by the violence of their exertions to ascend, and sometimes they fall upon the rocks and are taken. He records an ingenious but cruel mode occasionally adopted, of catching and killing Salmon for the amusement of a company !

" It is said that one of the wonders which the Frasers of Lovat, who are lords of the manor, used to show their guests, was a voluntary-cooked Salmon at the Falls of Kilmorac. For this purpose a kettle was placed upon the flat rock on the south side of the fall, close by the edge of the water, and kept full and boiling. There is a considerable extent of the rock where tents were erected, and the whole was under a canopy of overshadowing trees. There the company are said to have waited until a Salmon fell into the kettle, and was boiled."

There are many ways of taking Salmon, while pursuing their course up the streams ;—as by nets, or by building across the water weirs or dams, which prevent the advance or return of the fish. Numbers of Salmon are caught by the rod and line, and this sport has of late years become fashionable. Spearing Salmon, either by day-light, or torch-light, is also practised in the

north. The spear with which the fish is struck in the act of leaping is barbed like a fish-hook.

In London, Thames Salmon, when fortunately met with, obtain an extremely high price. The Severn Salmon are also much esteemed.

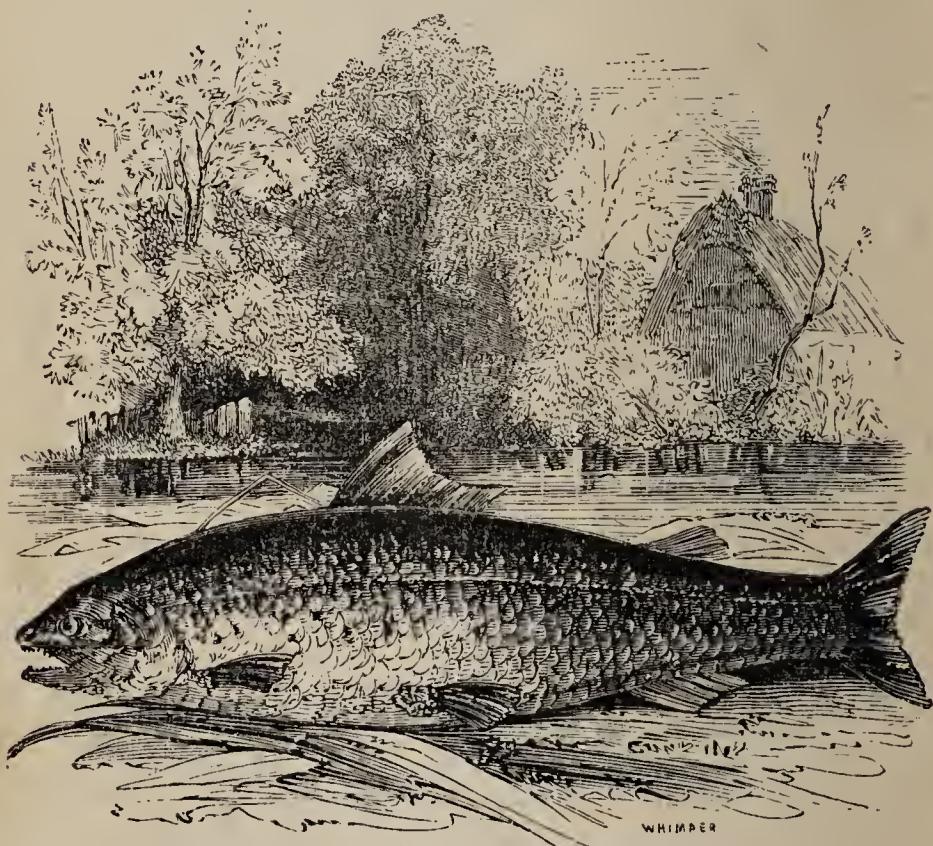
---

### THE COMMON TROUT.

THE Trout is a well-known inhabitant of most of the rivers and lakes of Great Britain. It is a voracious feeder, but so vigilant, cautious, and active, that much skill and patience are necessary for taking it. Its food generally consists of flies, though worms, grasshoppers, and small fish are eagerly devoured by it. Mr. Stoddart, a writer on Angling, mentions an interesting experiment, which was made some years ago in the south of England, in order to ascertain the effect of different kinds of food on this fish. "Some Trout were placed in three separate tanks, one of which was supplied daily with worms, another with live minnows, and the third with those small dark-coloured water-flies which are to be found moving about on the surface under banks and sheltered places. The Trout fed with worms grew slowly, and had a lean appearance; those nourished on minnows, at which they darted with great voracity, became much larger; while such as were fattened upon flies only, attained in a short time prodigious dimensions, weighing twice as much as both the others together," although the quantity of food swallowed by the fly-eaters was not so great.

Trout sometimes reach a vast size, and are said to live to a great age. One was caught at Salisbury, in January, 1822, in a small stream, branching from the Avon, which weighed twenty-five pounds; but this was an extraordinary specimen. They are met with of good size in the Thames near Kingston, Hampton

Court, Shepperton, and Chertsey. Some deep pools in the Thames above Oxford afford excellent Trout. "Few persons," says Mr. Yarrell, "are aware of the difficulty of taking a Trout, when it has attained twelve or fourteen pounds weight; it is very seldom that one of this size is hooked and landed, except by a first-rate fisherman. Such a fish, when in good condition, is considered a present worthy of a place at a royal table."



The age to which Trout may live has not been ascertained. We are told, in Mr. Yarrell's work,\* "that in August, 1809, a Trout died, which had been for twenty-eight years an inhabitant of the well at Dumbarton Castle. It had never increased in size from the time of its being put in, when it weighed about a pound; and it had become so tame, that it would

\* Vol. II. p. 55, ed. 1836.

receive its food from the hands of the soldiers." In August, 1826, "the Westmoreland Advertiser" contained a statement that a Trout had lived fifty-three years in a well in an orchard at Board Hall, near Broughton-in-Furness.

The Trout is fond of its own particular place in the stream : when alarmed it makes for the nearest hole in the bank, or hides under a stone at the bottom, and will allow itself to be taken with the hand from its hiding-place. Poachers catch them in this manner, and call it " tickling " them.

---

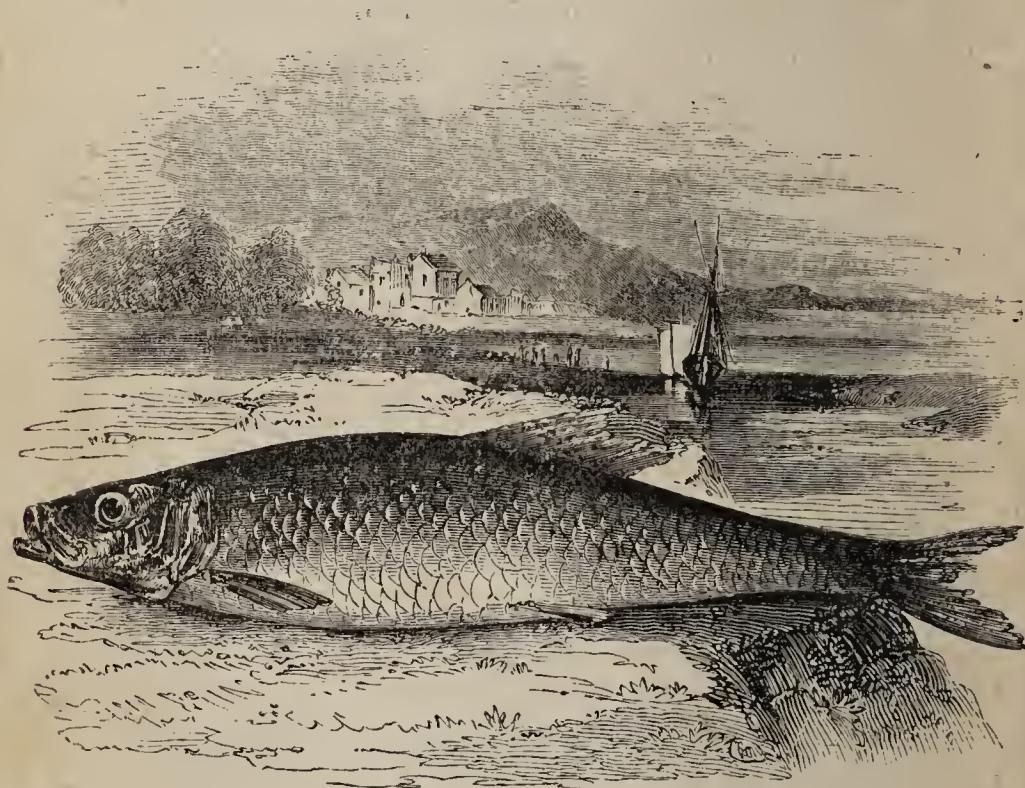
### THE HERRING.

THE common Herring visits our shores chiefly in the autumn ; it is then in its best state as an article of food. The fishing for it, which is a matter of vast national importance, is carried on with great spirit for certain periods, in different parts of Great Britain and Ireland. " And here," observes a naturalist, " we cannot but admire the order of Divine Providence, by whom this and several other species of fish are brought to the shores, within the reach of man, at the time when they are in their highest perfection, and best fitted to be his food."

Brought into the market in large numbers, and at a moderate price, immense quantities of them are eaten ; and from their fine and delicate flavour, the consumption of them is general among all classes. In this country, Yarmouth, in Norfolk, is the great and ancient mart of Herrings. Considerable numbers of them are salted and preserved in barrels. They are very plentiful along the Yorkshire coast, and among the Orkney and Shetland islands during the summer months. They once swarmed so excessively on the west side of the Isle of Skye, that the numbers caught were more than could possibly be carried away. After the boats were

all loaded, and the country round had been served, the neighbouring farmers took vast quantities for the purpose of manuring their grounds. Large shoals continued to frequent the same coast for many years, but not always in such great numbers.

Many are caught on the coasts of Essex and Kent in the nets used for taking sprats. In the London market, they are most esteemed in October and November.



The usual mode of fishing for Herrings is by drift-nets, which are suspended by the upper edge from a thick rope, called the drift-rope. Skill is necessary in the use of these nets, that they may hang perpendicularly in the water, with the meshes square, smooth, and at a proper depth; for according to the wind, tide, situation of their food, and other causes, the Herrings swim at various depths below the surface. The drift-rope is attached at one end to a large buoy, the fishing

boat retaining the other end, so that the nets are kept strained in a right line. This is done during the night. The fish are caught in the meshes of the nets, much in the manner as the mackerel are taken, according to the description already given. In the morning the nets are hauled in, and the fish secured.

Herrings do not frequent the same places for any length of time.

---

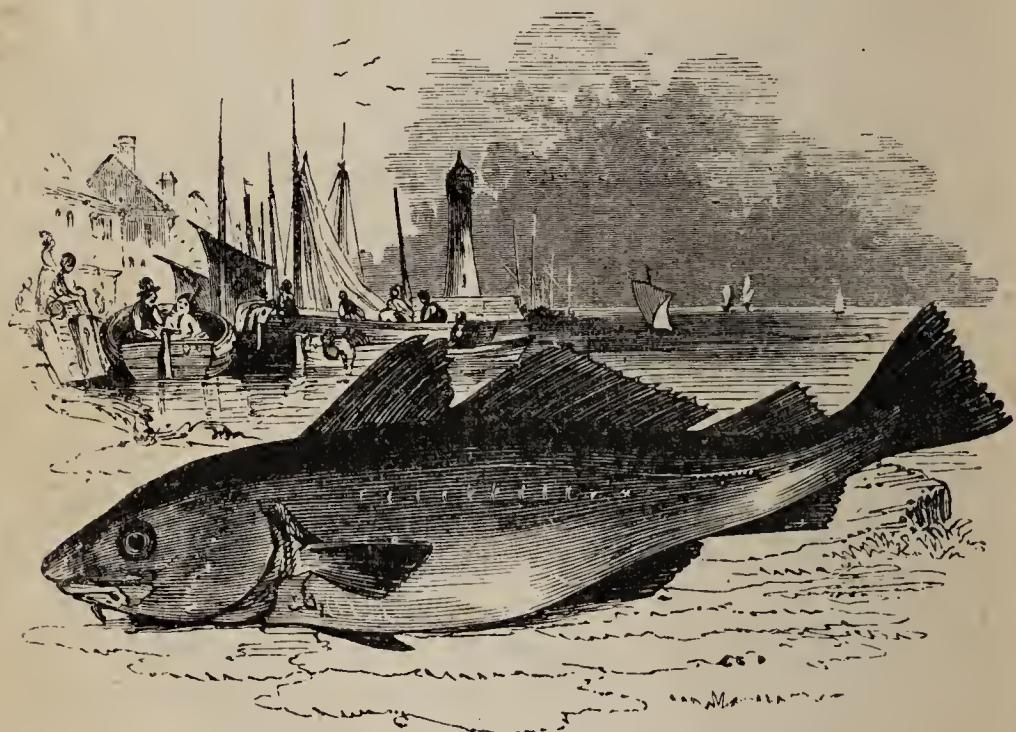
### THE CODFISH.

THE tribe to which this fish belongs is very numerous, including the fish represented in the next page, the haddock, hake, whiting, and some others. The several species inhabit the ocean, and seldom visit the fresh waters. The flesh of most of them is white, firm, and of good flavour.

The common Codfish is excellent as an article of food : and it is taken in vast numbers, in various seas. In this country it is found all round the coast : it abounds among the islands to the north and west of Scotland, and is also met with near the shores of Ireland. In the United Kingdom alone, this fish, in the catching, curing, and selling, affords employment and profit to many thousands of persons.

Codfish feed near the ground, on various small fish, worms, &c., at the depth of from twenty-five to forty or even fifty fathoms. Thirty-five crabs, none less than the size of a half-crown piece, have been taken from the stomach of one Cod. These fish are taken with lines and hooks. A long line is laid across the tide, and secured at each end by buoys and anchors, or grapples. At regular distances along the length of this line hooks are fastened by shorter and smaller cords. The hooks, which are near the ground, but do not quite touch it, are baited with limpet, crab, whelk, &c., and are taken

up, about six hours after they have been laid, in their order. While the hooks thus arranged are under water, the fishermen are engaged in taking fish with hand-lines. About five hundred have been caught on the banks of Newfoundland in ten or eleven hours, by one man ; and eight men, fishing for the London market, off the Dogger Bank, on the coast of Holland, in twenty fathoms of water, have taken one thousand six hundred Cod in one day. The Dogger Bank fish are highly



esteemed. They are brought in vessels called store-boats, having wells, in which the fish are preserved alive. Boats of this kind are said to have been first built at Harwich in the year 1712. They remain as low as Gravesend, where the water is sufficiently salt to keep the fish living ; if they were brought higher up, the fresh water would kill the fish. While in the wells, waiting for the market, the Cod are fed with live haddock, or other fish, which they devour voraciously.

Cod are in the best state for eating in the cold months of the year. Vast quantities of them are salted.

There is a small species, called the Poor or Power Cod, the appearance of which in some seas is a source of pleasure to the fisherman. It is called the fish-conductor, being generally followed by shoals of the larger kind, which prey upon their diminutive companions. "The fishermen," says Mr. Yarrell, "in their turn, prey upon them."

---

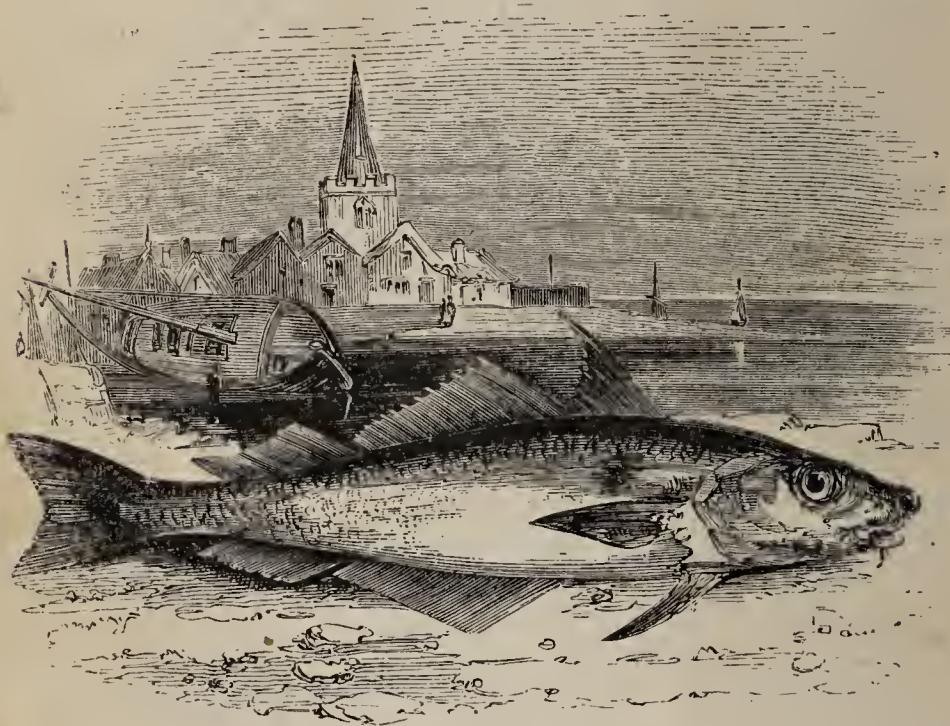
## THE HADDOCK.

THIS fish is almost as well known as the common cod ; and from the quantities taken round the coast, and the ease with which the flesh can be preserved, it is a fish of great value. Besides frequenting the coast of Great Britain, the Haddock may be traced nearly all round the shores of Ireland. The largest seen for some years past, was taken in Dublin Bay ; it weighed sixteen pounds. The most common weight of a Haddock is from two to four pounds.

Haddocks swim in innumerable shoals. Along the eastern coast, from Yarmouth to the Tyne, they are caught with long-lines and hand-lines. The most attractive baits are pieces of herring or sand-launce. Along our southern shores they are frequently taken with the trawl-net. Their food is small fish of various kinds. Some which were kept confined in a salt-water preserve, became so tame, that they ate limpets from the hand.

Mr. Yarrell, in his "History of British Fishes," has the following remark in allusion to the name of Onos, or Asinus, which is supposed to have been given by the ancients to this fish. "The dark mark on the shoulder of the Haddock very frequently extends over the back, and unites with the patch of the shoulder on the other

side, forcibly reminding the observer of the dark stripe over the withers of the ass. The superstition that assigns the mark on the Haddock to the impression left by St. Peter with his finger and thumb, when he took the tribute-money\* out of a fish of this species, has been continued to the whole race of Haddocks ever since the miracle, and may possibly have had its origin in the obvious similarity of this mark on the same part

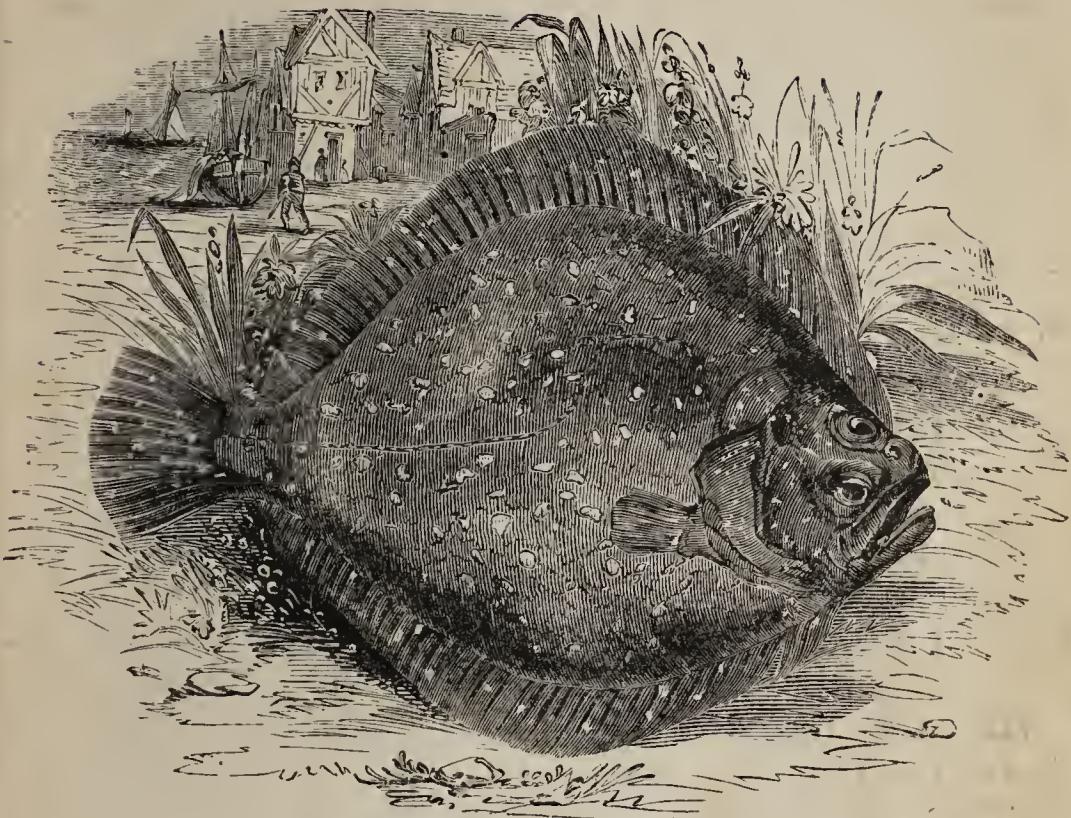


of the body of the Haddock, and of the humble animal which bore the Saviour. That the reference to St. Peter is erroneous, is shown by the fact, that the Haddock does not exist in the sea of the country in which the miracle was performed."

This superstition would not have been alluded to here, but from the circumstance of the Haddock being sometimes called St. Peter's fish.

\* Matt. xvii. 27.

## THE TURBOT.



THIS is one of the best, as well as one of the largest of the flat fishes, and is found on the coasts of Durham and Yorkshire, as well as on other coasts of our island. But the various sandbanks between the line of our Eastern shore and the coast of Holland are considered the best places for taking this valuable fish. At the beginning of the season (about the end of March, or the beginning of April), the trawl-net is used, which being drawn along the banks, brings up various kinds of flat-fish, as soles, plaice, and Turbot; but when the warm weather has driven the Turbot into deeper water, the men take to their small lines, each of which has several hooks baited with small fish. The smelt, and a bright-coloured eel-like fish, called the gore-bill, are

favourite bait for the Turbot. The Dutch fishermen have been very successful in securing supplies of Turbot for the London market. It is stated by Mr. Yarrell, that about one-fourth of the whole quantity of this fish brought to London is furnished by Dutch fishermen, who pay a duty of 6*l.* a boat, each boat bringing from 100 to 150 Turbot. The number of Turbot brought from various parts to Billingsgate market, within twelve months, up to a late period, he states to have been 87,958.

The form and appearance of the Turbot are well known. Its average weight is from five to ten pounds, though it is often found to weigh fifteen or twenty pounds, and more. The upper side of the body is dark-coloured and spotted, the under surface, smooth and white. The flesh on the dark-coloured side has been said to be the best meat. No creature has, perhaps, been more celebrated as an article of luxury for the table than this. A Roman satirist has given an anecdote of an enormous Turbot, which was brought to Rome, and presented to the Emperor Domitian. So large was the fish, that for the boiling of it no pot of sufficient size could be found. In this distress, the Emperor calls together his Senate, who sit in council upon the subject.

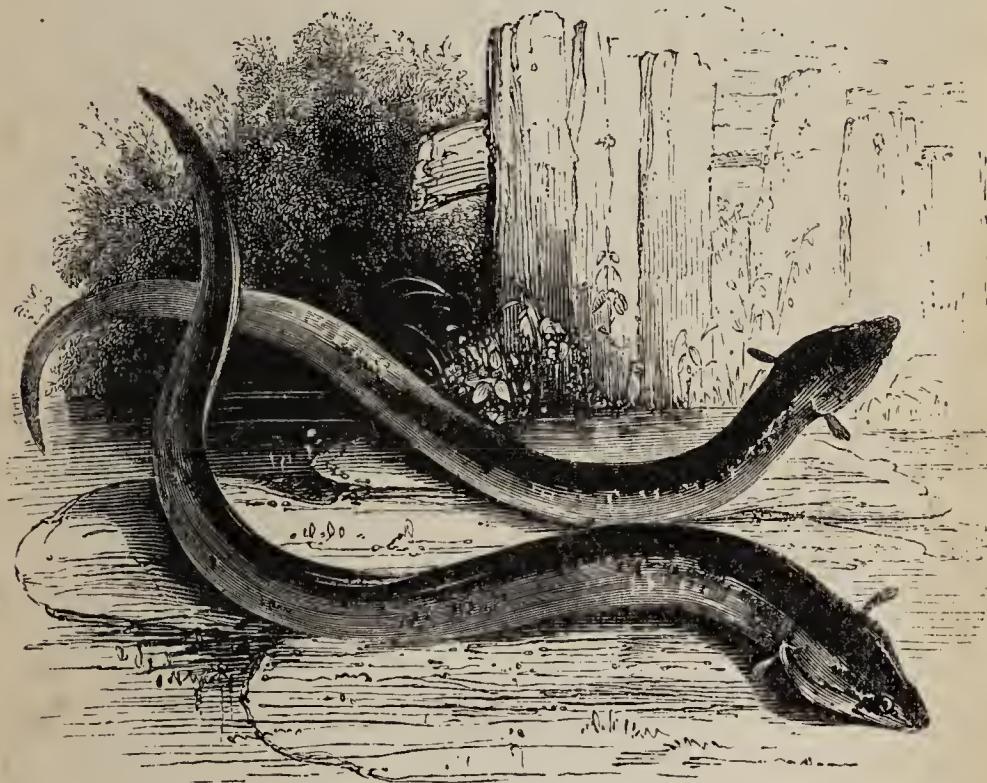
“The Emperor now the important question put,  
 ‘How say ye, Fathers, shall the fish be cut?’  
 ‘O far be that disgrace !’ Montanus cries ;  
 ‘No ! let a pot be formed of amplest size,  
 Within whose slender sides, the fish, dread sire,  
 May spread his vast circumferenee entire !’”

GIFFORD’S JUVENAL, Sat. iv.

## THE EEL.

EELS are found in fresh water in almost every part of the world. Three or four different species of this valuable fish are known in our own country. The London market is principally supplied from Holland,

by Dutch fishermen. There are two companies in Holland, which are said to have five vessels each. The vessels are built with a capacious well, in which large quantities of Eels are preserved alive till wanted. One or more of these vessels may be generally seen off Billingsgate; the others go to Holland for fresh supplies, each bringing a cargo of from 15,000 to 20,000 pounds weight of live Eels. Eels and salmon are the only fish sold by the pound weight in the London markets.



Eels are averse to cold; there are none in the Arctic regions, none in the rivers of Siberia, the Wolga, or the Danube. In milder regions the Eels, during the cold months of the year, remain imbedded in the mud; and large quantities are often taken by spears in the soft soils of harbours, and banks of rivers, from which the tide recedes, leaving the surface exposed. The fish bury themselves twelve or sixteen inches deep to avoid the cold.

Mr. W. Yarrell, in his "History of British Fishes," informs us, that the passage of young Eels up the Thames at Kingston, in 1832, commenced on the 30th April, and lasted till the 4th May. Some notion may be formed of the quantity of these, each about three inches long, that pass up the Thames in the Spring, from a calculation made that from 1,600 to 1,800 passed a given point in one minute. This passage of young eels is called *Eel-fare* on the banks of the Thames ; *fare*, being the Saxon word signifying to travel. Thus a traveller is called a *way-faring* man ; the charge for travelling is called a *fare* : hence also the word *thorough-fare*.

Eels occasionally quit the water when the grass is wet, and go short distances overland to search for frogs or other food, or to change their situation to more suitable streams. They are very voracious feeders at certain times in the year ; and have been seen sometimes eating vegetable matter, aquatic plants, &c.

Ely is said to have been so named from the quantity of Eels there, and from the rents being formerly paid in this fish ; Elmore, on the Severn, obtained its name from the large number of Eels. These fish are in great request in many other countries.

Ellis, in his "Polynesian Researches," says : "In Otaheite, Eels are great favourites, and are tamed and fed until they reach an enormous size. These pets are kept in large holes, two or three feet deep, partially filled with water. On the sides of the pits they generally remained, except when called by the person who fed them. I have been several times with the young chief, when he sat down by the side of the hole, and, by giving a shrill sort of whistle, has brought out an enormous Eel, which has then moved about the surface of the water, and eaten with confidence out of its master's hand."

## THE STURGEON.



THIS is a sea-fish which generally inhabits the deep water beyond the reach of nets ; and is seldom, if ever, caught on the fisherman's lines. At certain seasons, however, it makes its way into the rivers. It is found on various parts of our coast, and when caught in the Thames is considered a royal fish, due to the Sovereign.

It is of large dimensions, seldom measuring less than four or five feet in length, and varying from that size to sixteen feet. When exposed at a fishmonger's shop in London, it generally attracts, by its uncommon and showy appearance, a number of spectators. The body is armed from head to tail with five rows of large bony tubercles ; one of these rows extending along the back, and two on each side. The snout is long, and has tendrils near the tip. The mouth, which is beneath the head, is somewhat like the opening of a purse, and is very curiously formed.

The largest Sturgeon ever known in Great Britain was taken in the river Esk, and weighed 460 pounds.

In the northern parts of Europe this fish is much more common than with us, and is a great article of commerce. Caviar, which is reckoned a great delicacy by some, but thought unpalatable by many, is made of the roe ; isinglass is formed of one of the membranes ; and the flesh, when well cooked, is savoury, having a taste like veal.

The Sturgeon was so much valued in the time of the Emperor Severus, that it was brought to table with great honours, preceded by a band of music. This may have given rise to the ancient custom, in our own country, of its being presented by the Lord Mayor to the Sovereign.

Bingley calls the Sturgeon "clumsy and toothless," and tells us, that it hides its large body among the weeds in the water, only showing the tendrils which grow near its mouth. These tendrils look like worms ; and the small fish and sea-insects, on approaching, intending to feed upon them, are sucked into the creature's mouth.

When the Sturgeon is caught in a net, it makes scarcely any resistance, but is drawn out of the water apparently lifeless.

---

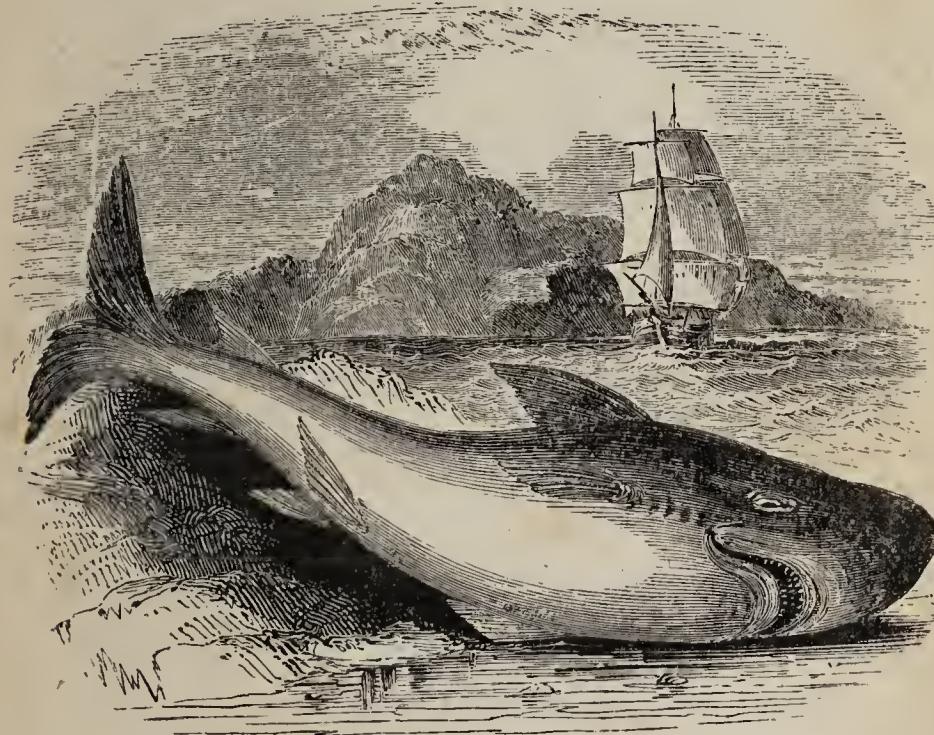
### THE WHITE SHARK.

THIS fish is the terror of mariners in most of the warm countries of the globe. It is fierce and voracious, and swims with amazing swiftness and ease. There are several species of Shark ; and even the smaller ones are dreaded by fish much larger than themselves ; but the White Shark, which grows to a large size, and sometimes weighs between 3,000 and 4,000 pounds, is considered the most terrible. The body is long, covered

with a hard skin ; the head large ; the mouth wide ; the upper jaw armed with six rows of sharp triangular teeth, and projecting far beyond the lower jaw, which has four rows of teeth, sharper than those above.

The White Shark uses these dreadful weapons with a strength and ferocity that have often proved fatal to human beings. Persons while swimming have been seized and devoured by Sharks.

Derham, in his "Physico-Theology," remarks, that against some animals, "Divine Providence itself hath



provided a guard. So the Shark, of which take my often commended friend Dr. Sloane's observation : 'It hath this particular to it, with some others of its own tribe, that the mouth is in its under part, so that it must turn the belly upwards to prey. And was it not for that time that it is in turning, in which the pursued fishes escape, there would be nothing that could avoid it ; for it is very quick in swimming, and hath a

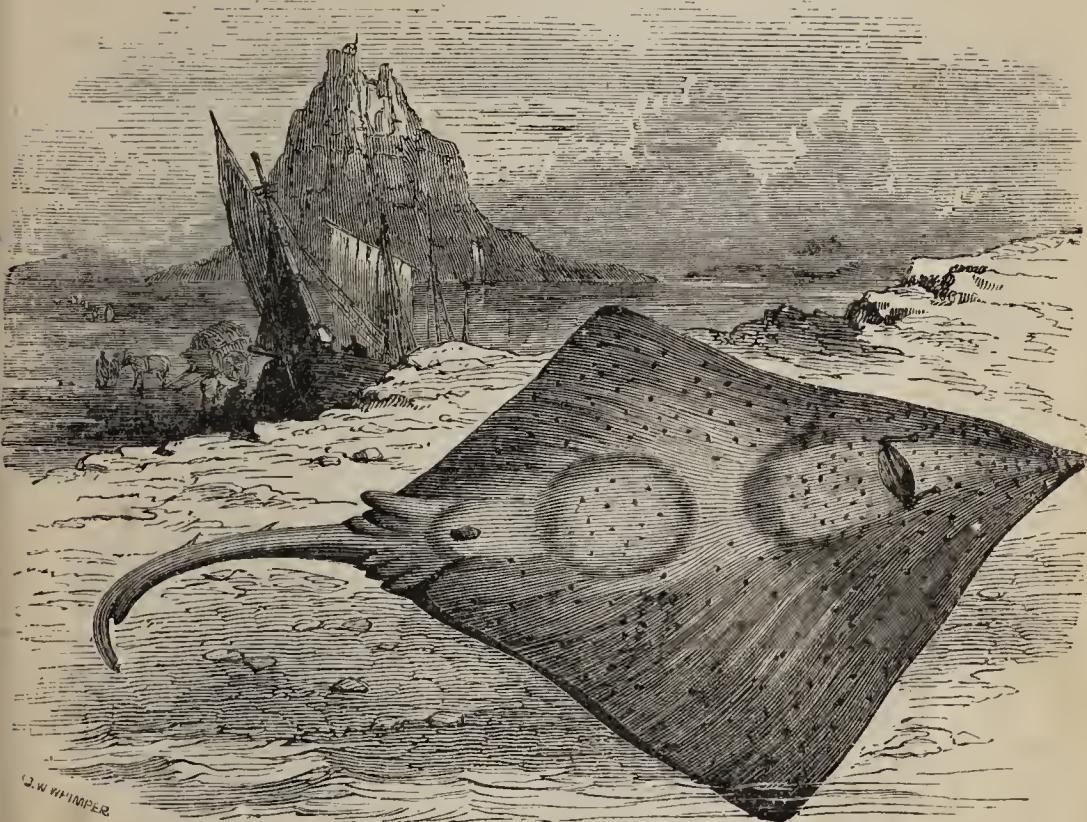
vast strength, with the largest swallow of any fish, and is very devouring.'—*Sloane's Voyage to Jamaica.*"

It is said that in the Pearl Fisheries of South America, the Negro diver, in order to defend himself from these monsters of the deep, carries with him into the water a sharp knife, which, if the fish offers to assault him, he endeavours to strike into his belly, on which it generally makes off.

The late Sir Brook Watson was swimming at a little distance from a ship in Montego Bay, Jamaica, when he saw a Shark approaching him. He instantly cried out for assistance, and a rope was thrown ; but while the men were drawing him into the boat, the animal darted at him, and in a moment tore off his leg. The painful scene is represented in a good painting which is in the possession of Christ's Hospital. This person, who afterwards became Lord Mayor of London, wore a wooden leg. Being asked one day, in a public carriage, by a stranger, who was more curious than considerate, how he had lost his leg, Sir Brook answered, "It was bitten off!" and gave no further information.

The White Shark, the Blue Shark, the Fox Shark, and some other species, which are more or less formidable, are occasionally met with on the British coast ; most of them are well known in the Mediterranean ; and they are great wanderers. The Basking Shark is harmless. The White Shark will attend a ship in expectation of what may be thrown overboard, and will readily take a piece of flesh fastened as bait on an iron crook. When the dreaded creature is drawn upon deck, the sailors generally attack it with rage and fury, and, first cutting off its tail, soon put an end to its existence. The flesh of this fish, though coarse, is sometimes eaten by the men on a long voyage.

## THE SKATE.



THE Ray, or Skate, is a flat fish, and is lozenge-shaped. The form of the body contrasts strongly with the long narrow tail, which is furnished with two and sometimes three small fins, and is in some species armed with one or more sharp spines or thorns, which give it the power of inflicting severe wounds on its enemies. Indeed, it defends itself by lashing violently with its tail. The family of the Rays is very numerous ; as the Electric Ray, the Long-nosed, the Sharp-nosed, the Bordered, the Homelyn, the Small-eyed, the Starry, the Sting, the Eagle, the Thornback.

The animal represented above is frequently called the True Skate, to distinguish it from some other species ; and it is better than they as an article of

food. It is found among the Orkneys, and on the coast of Scotland, where it is called the Blue Skate and Grey Skate. Thence it is met with southward as far as Kent, and westward to Cornwall. It is also taken in Ireland. At Lyme Regis it is called the Tinker, on account of its dusky grey colour. It generally lives at the bottom of the water on beds of sand or mud; when disturbed it slides along with a wavy motion. It is very voracious. Five different kinds of fish have been taken from the stomach of a single specimen. The teeth are sharp; and so powerful are the jaws that they are capable of crushing the shell of a full-grown crab with ease.

Skates are often by the fishermen called Maids.

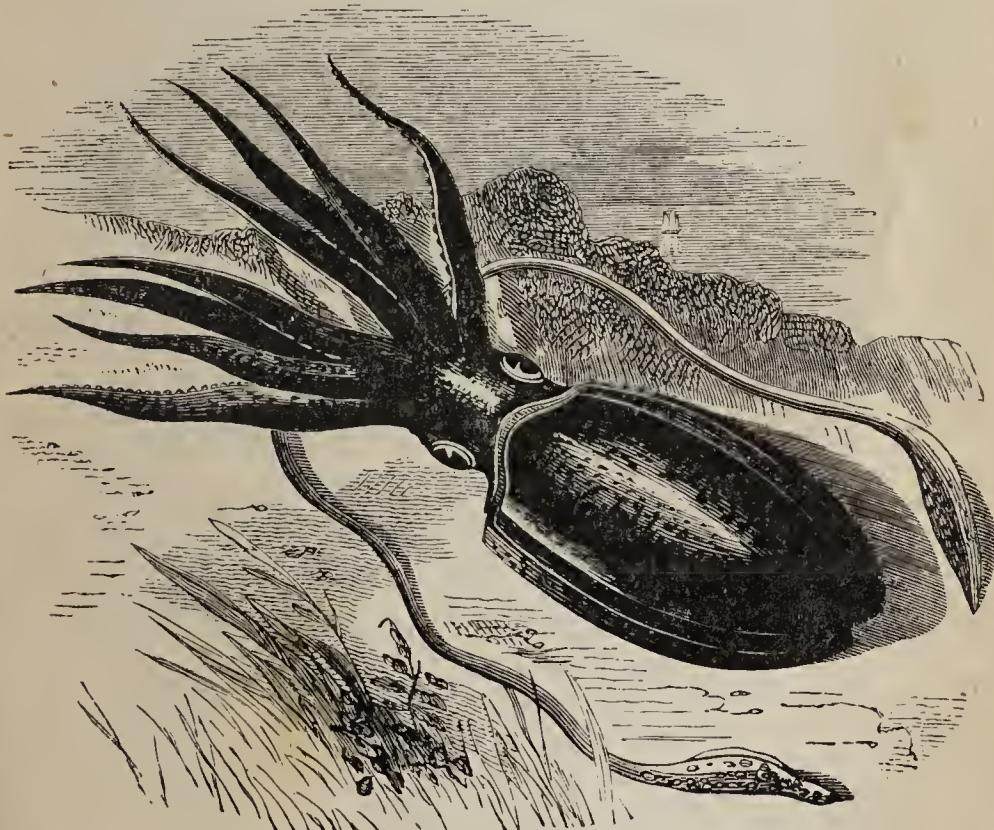
---

### THE CUTTLE-FISH.

THE Cuttle-fish is a species of the *Cephalopoda*; this being a Greek term, compounded of two words signifying *head* and *feet*. A cephalopod has a large head, from which proceed eight or ten long legs. These legs are furnished, along the whole of their inner surface, with suckers, which may be compared to cupping-glasses, and by means of which the fish holds its prey. The body is of a jelly-like substance, and is surrounded by a mantle in the form of a purse. In order to cover its retreat from its enemies in the sea, the Cuttle-fish has a remarkable power of spouting out a fluid as black as ink from an opening at the back of its head. This fluid mixes with the water. One of our writers on natural history compares an obscure and angry author, who hides himself under his own ink, to this animal.

The ink, when dried, forms a valuable substance for painting; and is called *sepia*. Some persons have supposed that the Indian ink of China is composed of this material: but there is no certainty in this.

The late Dr. Buckland, Dean of Westminster, in his *Bridgewater Treatise*, mentions as a very curious fact respecting the Cuttle-fish, that among the petrified remains of the ancient world was found the ink contained within the bodies of extinct species of cephalopods. He says, "The preservation of this substance is established beyond the possibility of a doubt by the recent discoveries of numerous specimens in the lias of Lyme Regis, in which the ink-bags are preserved in a fossil state, still distended as when they formed parts of the organization



of living bodies : so completely are the characters and qualities of this ink retained in these specimens." He adds that, in 1826, he submitted some of the fossil ink to Sir F. Chantrey, requesting him to try its power as paint, and that a drawing was accordingly prepared with a powdered portion of it. A celebrated painter, to

whom the drawing was shown, and who had heard nothing of its origin, at once pronounced it to be tinted with sepia of excellent quality, and begged to be informed by what colourman it had been prepared. The sepia used in drawing is from the ink-bag of an Oriental species of Cuttle-fish.

There is another kind of Cuttle-fish, called *Octopus* from its having eight legs. It is sometimes called the "Poulpe," and by the sailors the "rock-squid." In the centre of the head, between its two large eyes, is a kind of beak, like that of a parrot. This is used in devouring such victims as come within its grasp. It creeps along the bottom of the sea, or among the seaweed on the rocks, and feeds on fish of various kinds, including crabs, lobsters, and other shell-fish. Its courage and cunning are said to be equal to its rapacity, as it can hold its prey with the firmness of a vice; but when alarmed, can at will disengage itself in an instant, and swim away. It seems to have been one of these which Mr. Beale met with, while searching for shells upon the rocks of the Bonin Islands. It was creeping on its eight legs, when he tried in vain to stop it, by pressing his foot strongly on one of these limbs. Finding it slip from under him, he seized it firmly in his clenched hand, and gave it a jerk with all his force; on which the enraged creature suddenly sprung upon his bare arm, and tried to bite with its beak. Nor would it let go its hold, till the captain of the vessel, who was also seeking for shells, came to Mr. Beale's assistance, and was obliged to cut off his enemy piecemeal. The expanded limbs of this creature measured across about four feet; its body was the size of a man's fist. We read of some enormous specimens of Cuttle-fish in hot climates; the limbs, if we may believe the account, being as large as those of a man.

The Common Cuttle-fish, represented on the preceding page, is about a foot long. Its skin is smooth, whitish, and spotted with brown. It is very common on the

English coasts ; and the horny layer enclosed in its body is frequently found on the sands. It is a well-known substance, and is much employed in the manufacture of tooth-powder.

---

## THE OYSTER.

THIS well-known animal is of the class called CONCHIFERA (Bivalve Mollusks). It is enclosed within a shell composed of two pieces, united by a hinge, allowing them to open and close. These two pieces or valves are unequal in the Oyster ; the upper valve being flat, the lower much hollowed. They can be brought together, and held with wonderful force by the animal within, when it is in health and vigour ; and as it is entirely stationary, these muscular powers are of the greatest use in supplying its wants, and protecting it from danger. There is only one British species. The metropolis is chiefly supplied from Colchester. Whitstable, Rochester, Milton, Faversham, and Queenborough, also furnish Native Oysters. The Natives are generally small, with the lower shells deep. Oysters from the Kentish coast were highly esteemed for their sweetness by the Romans two thousand years since. The wanton luxury of their feasts was severely lashed by Juvenal, in his Fourth Satire, in which, describing an epicure who had been an associate with Nero in his scandalous excesses, the poet says,—

“ And in my time none understood so well  
The science of good eating : he could tell,  
At the first relish, if his oysters fed  
On the Rutupian\* or the Lucrine bed :  
And, from a crab or lobster’s colour, name  
The country, nay, the district whence he came.”

Much information respecting the natural history of

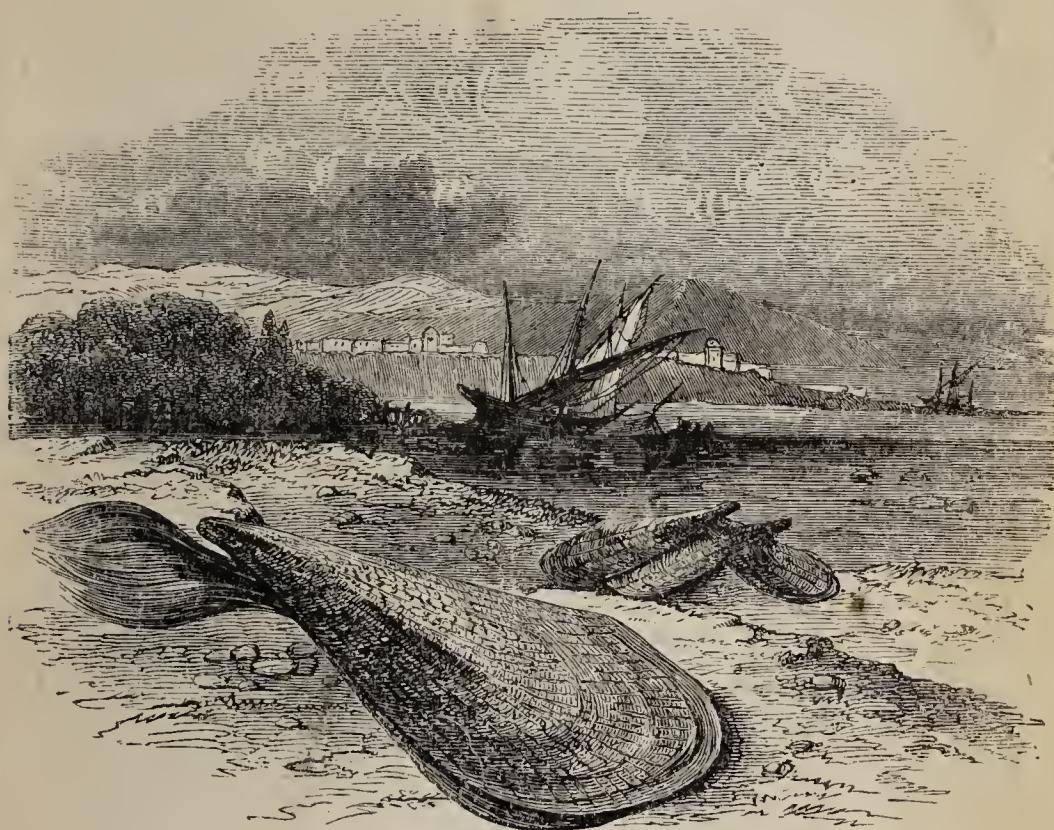
\* *Rutupinus Fundus*, The Richborough bed Kent.

the Oyster is given by Bishop Sprat, in his history of the Royal Society. In consequence of the value of this fish, as a favourite article of food, it has always been carefully preserved. Since the use of railroads and steamboats, large quantities of sea Oysters are brought



from Cornwall, the coast of Wales, the Isle of Wight, Sussex, and even from Ireland and Scotland. Some Oysters are considered full grown for the market when from five to seven years old ; others at four years. The age is shown by the annual growth of layers or "shoots" on the convex shell. After three or four years it is not easy to count the layers.

## THE PINNA.



THE *Pinna*, a sea shell-fish, belongs to the family *Mytilidae*, or *Mussels*, and is met with on most rocky coasts, where the animal can find moorings; fastening itself, as it does, to stones and other substances, which are covered by the sea at high water, but left dry on the ebbing of the tide. The *Pinna* is also found on low, flat, sandy, or pebbly shores. When it is once fixed by its byssus, or cable, it is safe from the tide, and the violence of the waves. The byssus consists of threads formed from the animal. In the same manner the threads issue from the silk-worm and other caterpillars, as well as from the spider. The threads of the byssus are extremely fine and strong, and of equal thickness throughout their whole length. A valuable kind of

Pinna is found in the Mediterranean. It is for the sake of the byssus for manufacture, more than for the flesh of the Pinna as an article of food, that the inhabitants of Sicily and Calabria seek after this shell-fish.

The cut on the preceding page represents a kind which sometimes grows to a foot and a half or two feet in length. The shell is, for its size, thin and delicate, and may often be noticed in museums, where the Pinna looks like a large and rather flat mussel. With shells of this species may sometimes be seen tufts of brown silky byssus. Articles made of this material find a ready sale in Italy. The tuft is cut off close to the shell, then dried and spun, and woven into gloves, stockings, and caps, and sometimes, it is said, into garments. But these goods are sold chiefly as curiosities, and not for use. It is remarkable that the word byssus (*Byssos, Fine Flax, or the Linen made from it*) is used as “the fine linen” in which the rich man was clothed, in the Parable of Dives and Lazarus.\*

Small pearls are sometimes found on opening the shell of the Pinna.

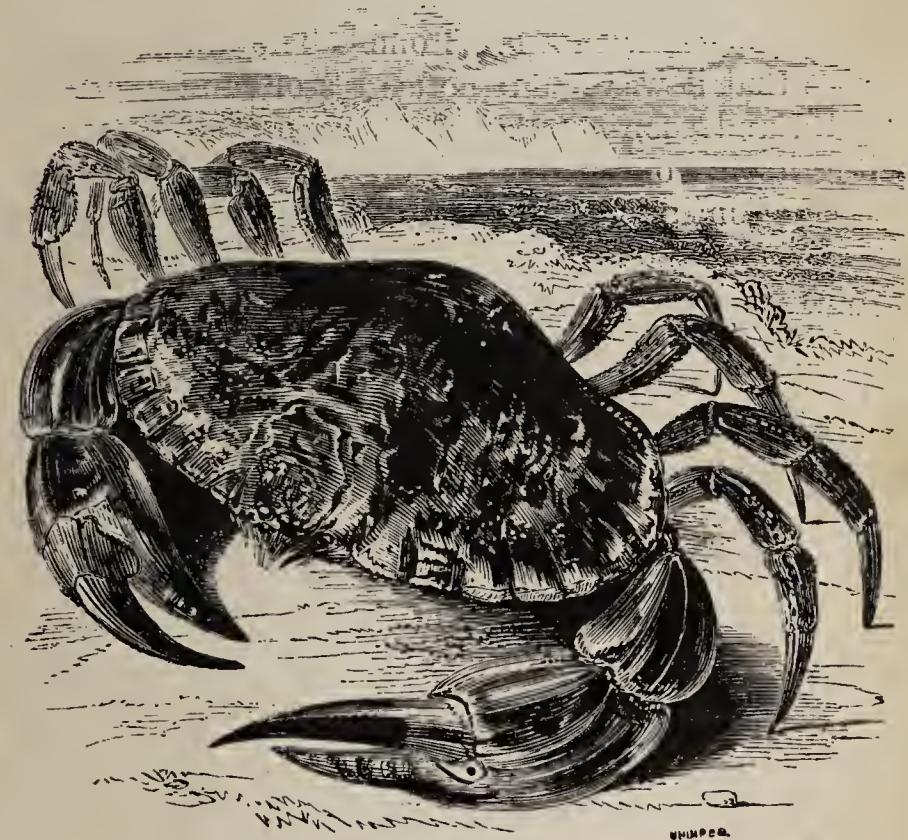
---

## THE CRAB.

THE animals of the Crab tribe live chiefly in the sea. They are, however, amphibious, living on land as well as in water. The common Crab, represented in the cut, which is sometimes called the Black-clawed or Eatable Crab, is valuable as an article of food, and is found in great quantities, and of various sizes, on the rocky coasts both of Europe and India. Many are brought to the London market from the coasts of Devonshire and Dorsetshire, as well as from other parts of the country. The several species of this creature are very numerous. Some crabs weigh several pounds, others only a few grains.

\* Luke xvi. 19.

The most remarkable circumstance in their history is the changing of their shells and broken claws at certain periods. At these times, until the new shell is formed, they retire among the hollows of the rocks, and under large stones. Dr. Darwin, on the authority of a friend who had been engaged in surveying the sea-coasts, says that a hard-shelled Crab always stands sentinel to prevent the sea-insects from injuring their companions



in their defenceless state ; and that from the appearance of this sentinel, the fishermen know where to find the soft ones, which they use for bait in catching fish. He adds, that though the hard-shelled Crab, when he is on duty, advances boldly to meet the foe, and will with reluctance quit the field ; yet at other times he shows great timidity, and is very expeditious in effecting his escape from his enemies. If often interrupted, or sud-

denly alarmed, he will, like the spider, pretend to be dead, and will watch an opportunity to sink himself into the sand, keeping only his eyes above ground.

Crabs are naturally quarrelsome, and frequently fight among themselves. Their claws are then terrible weapons, with which they lay hold of each other's legs : wherever they seize, it is difficult to make them give up their hold ; if a claw be lost in the combat, it will, ere long, be renewed from the joint at which it was broken off. A Crab, being irritated, seized one of its own small claws with a large one. The animal did not perceive that it was itself the aggressor, and exerted its strength, and soon cracked the shell of the small claw. Feeling itself wounded, it cast off the piece in the usual place, but continued its hold with the great claw a long time afterwards.

Crabs are very tenacious of life. It is said that they will live, confined in the pot or basket in which they have been caught, for months together, without any other food than that which is contained in the sea-water.

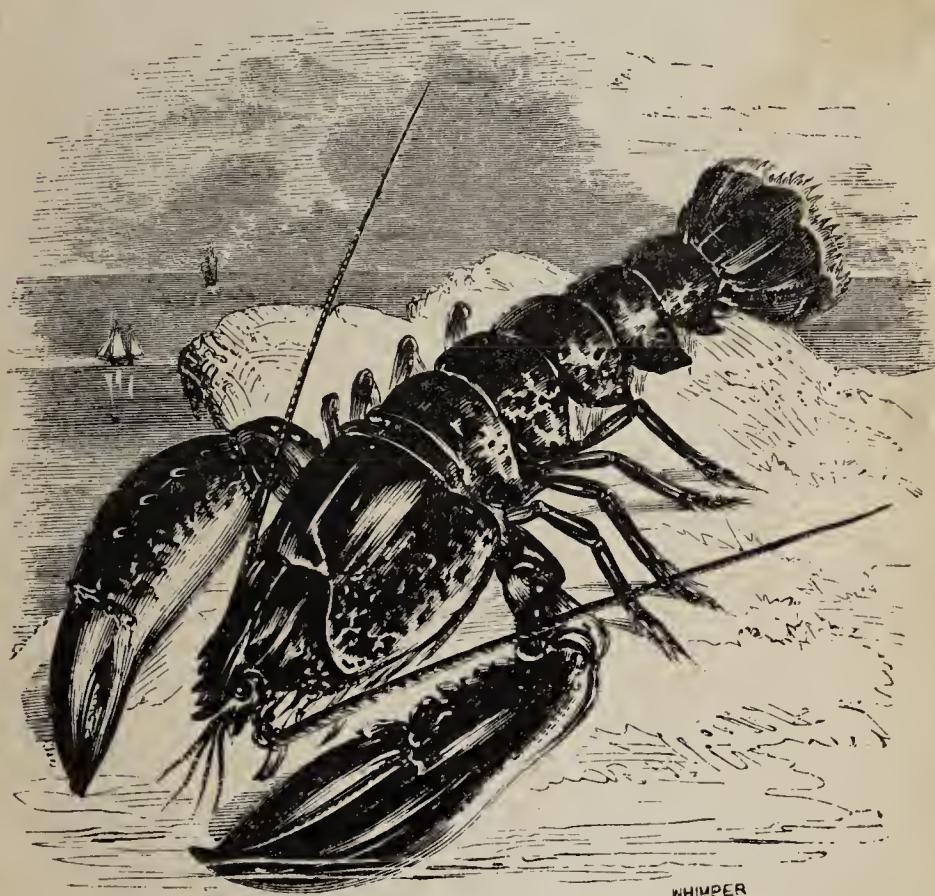
---

### THE LOBSTER.

LOBSTERS live in the sea, and are found on most of the rocky coasts of Great Britain. They feed on small fish, and any animal matter they may find. Some are caught with the hand, but the greater number in pots ; these are traps made of twigs, in the form of wire mouse-traps, and when properly baited, they are fastened to a cord sunk in the sea, their place being marked by pieces of cork.

Under water the Lobster is able to run very swiftly on its legs or small claws ; and if alarmed it can spring tail foremost to a surprising distance, almost as swiftly as a bird can fly. Large quantities of this favourite shell-fish are supplied, especially in the summer months, for the several markets.

Like the rest of the crab-tribe, Lobsters cast their shells once a year ; and if a claw be lost, another claw will grow in its place. The pincers of one of the claws are furnished with knobs, and those of the other are sharper, and more in the form of a saw. With the former pincer the animal keeps hold of the stalks of sea-plants, and with the latter it cuts and minces its food.



WHIMPER

Paley, in his *Natural Theology* (Chapter on Compensation), speaking of the wonderful contrivance made for the renewal of the shell of the Lobster, says : “How, then, was the growth of the Lobster to be provided for ? Was room to be made for it in the old shell, or was it to be successively fitted with new ones ? If a change of shell became necessary, how was the

Lobster to extricate himself from his present confinement? How was he to uncase his buckler, or draw his legs out of his boots? The process which fishermen have observed to take place is as follows:—At certain seasons the shell of the Lobster grows soft; the animal swells its body; the seams open, and the claws burst at the joints. When the shell has thus become loose upon the body, the animal makes a second effort, and by a tremulous, spasmodic motion, casts it off. In this state the liberated but defenceless fish retires into holes in the rock. The released body now pushes its growth. In about eight-and-forty hours a fresh concretion of humour upon the surface, that is, a new shell, is formed, adapted in every part to the increased dimensions of the animal. This wonderful mutation is repeated every year."

In another part of his work, this author says, "The shell of a Lobster's tail, in its articulations and overlappings, represents the jointed part of a coat of mail; or rather, which I believe to be the truth, a coat of mail is an imitation of a Lobster's shell."

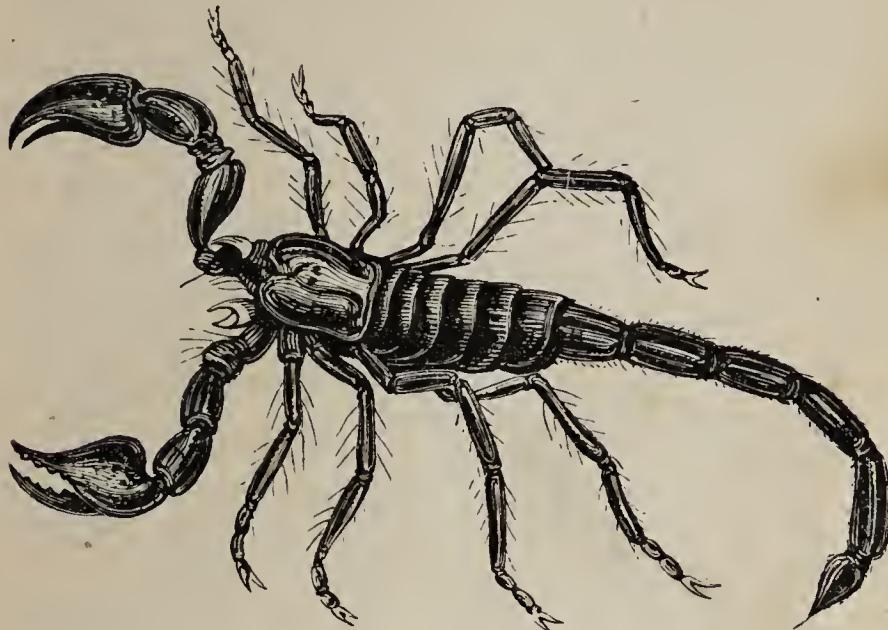
---

### THE COMMON SCORPION.

WE ought to be very thankful that the Scorpion is not a native of this land. The very look of the creature even in a quiet state is dreadful; but what must it be in hot countries, when on being suddenly disturbed among dry crumbling stones, or in some unnoticed corner of a house, it is seen running quickly along, with its jointed tail curved over its back and its enormous crab-like claws extended to seize its prey! At the end of the tail is a hooked poisonous sting. Wounds inflicted with this weapon are terrible even to man, but seldom prove fatal. Mr. Kirby states that the only means of saving the lives of our soldiers who were

stung by scorpions in Egypt was amputation. The whole body is covered with a hard shelly crust.

Among the many passages in Scripture which refer



to the cruelty and treachery of the Scorpion, may be mentioned Deut. viii. 15; 1 Kings xii. 11; Ezek. ii. 6; Luke x. 10; Rev. ix. 5, 10.

---

## THE STAG-BEETLE, AND THE CATERPILLAR.

THE families of Beetles, *Coleoptera* (signifying *a shield* and *a wing*), are very numerous; the species already known being stated at not fewer than fifty thousand. Each Beetle has four wings; one pair of wings being thick and leathery, and, when at rest, like a couple of shields, meeting in the middle. Both pairs of wings are shown in the engraving of the Stag-beetle. This Beetle is distinguished by the length and stoutness of

its mandibles, or jaws, which have the appearance of stags' horns. These horn-like jaws, have sometimes a reddish-brown colour: they appear to be intended to pierce and cut the leaves and twigs, as well as the green bark, on which the Beetle feeds, thus causing the sap to flow. The Stag-beetle may be seen flying about



on summer evenings, especially round the oaks, of the young leaves of which it is fond. Some of this tribe, of the most brilliant hues, are found in Australia, New Zealand, and South America.

It must be evident to every thinking mind that Almighty goodness has endowed these creatures of His hand with a capacity for happiness, and supplied them with means of enjoyment, of which it would be cruel in us wantonly to rob them. "The Lord is good to all,

and His tender mercies are over all His works." It should be strongly impressed upon children, that all animals, whether great or small, have a right to expect kindness and protection from man. Let not the young imagine that, because a creature is much smaller than themselves, they have a right to vex or destroy it. On the contrary, from its exposed and defenceless state, it should receive humane treatment from every one.

---

### THE CATERPILLAR.

THE name of Caterpillar is given to the larva of a Lepidopterous insect. Insects of this order—as butterflies and moths—are of vast variety and exceeding beauty. *Lepidopterous* is derived from two Greek words, which mean *a scale*, and *a wing*; the butterfly, or moth, having four wings thickly clothed on both sides with small delicate scales of different colours, and forming the lovely patterns which we see on the perfect insect. Before these charming hues appear, the larva \* which first comes from an egg, becomes a Pupa,† or Chrysalis.

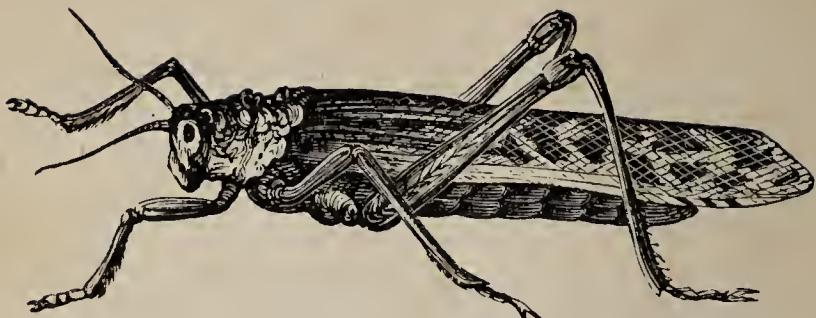
There are perhaps no insects so destructive as Caterpillars. Most of them feed on the leaves of trees and plants; some gnaw the flowers, roots, buds, and seeds; others eat the wood; certain species attack our linen and clothes. When moths once gain ground, it is most difficult to dislodge them; especially as their increase is so great and rapid. Their destructive character, in the punishment of sinful nations, is shown in Scripture in most powerful descriptions.‡

\* Meaning literally, A mask.

† Pupa, "A baby, doll, or puppet."—LITTLETON'S *Latin Dictionary*.

‡ Psalm lxxviii. 46; cv 34. Joel i. 4; ii. 35.

## THE LOCUST.



WHEN we see a print of a mere insect, like the Locust, small and harmless in itself, we can scarcely imagine at first the dreadful effects it is able to produce. But the vast swarms and countless numbers of these creatures collected together shut out the light of the sun, eat up every green herb, and leave the fields as if a fire had passed over them. "The land is as the garden of Eden before them, and behind them a desolate wilderness."\* These awful visitants, so successful in destroying the fruits of human industry, were, we know, sent by the Almighty as one of the plagues of Egypt, when Pharaoh refused to let the people of Israel go.†

But although the Locust is often the scourge of those countries in which it abounds, the inhabitants sometimes find it useful as an article of food. Locusts and grasshoppers were allowed in the old Jewish law to be eaten.‡

A large swarm of Locusts settled upon the ground about London, August 4, 1748, and consumed the vegetables. Great numbers fell in the streets. Many were picked up and preserved in cabinets.

The study of the vast class of Insects is a most pleasing and instructive pursuit. A careful survey of these specimens of creative power and skill, tends to

\* Joel ii. 3. See the description in this chapter, ver. 3—11.

† Exod. x. 13, 14. Psalm cv. 34, 35.

‡ Lev. xi. 22.

raise our admiration of the wisdom of God in the works of His hands. Nor only this ; but it leads us to treat with thoughtful kindness creatures on whose structure He has seen fit to bestow so large a measure of His care. Their forms and colours are curious and beautiful upon a general examination ; but when the smaller species of insects, or portions of the larger kind, are submitted to the microscope, wonder and surprise are added to the pleasure afforded by the sight.

---

### THE DRAGON FLY, AND THE BUTTERFLY.

THE richly-coloured Dragon Fly, which we sometimes see glancing past us on a bright summer's day, was also a worm. It has now escaped from its case to spread its gauze-like wings in the sunny air.

“ The helpless, mute, and shrouded thing,  
Loosed from its earthly covering,  
From shape uncouth and dusky hue,  
Like some fair vision sprung to view !  
A glossy wing, in burnish'd pride  
Unfolding, rose from either side,  
And show'd a form in beauty drest,  
Like gold-dust on an azure vest ;  
Whilst hands unseen had given the power  
To gather sweets and suck the flower.”

The light, graceful, and brilliant Dragon Fly may often be seen sweeping round ponds or lakes, either in search of food, or for the purpose of laying its eggs in the water.

The Butterfly before us is the Peacock Butterfly. The Caterpillars or Butterflies of this kind (*Vanessæ*) are defended by bristles or thorns. The different species of Butterflies are very numerous, but all are lovely. The splendid Swallow-tailed Butterfly is much admired. Even the common Cabbage Butterfly, which in its caterpillar state is a sad mischief-maker in the kitchen-garden, has its beauties. The tongue of the Butterfly

is a most pleasing object when shown in the focus of a microscope. It is a long spiral tube, looking like the finest and most delicate net-work, coiled up under the head of the insect, and evidently formed for rifling the nectar of flowers, and sucking in the sweet food on which the dainty little animal lives. The Butterfly, with its gorgeous wings and free course of flight, was lately a caterpillar,

“a thing that crept  
On the bare earth, then wrought a tomb and slept.”



The amazing change from the “tomb,” the chrysalis state, to the perfect Butterfly, the “Psyche,”\* has often been well compared to our great transformation from death to life on the Resurrection Day.

\* The Greek word *Psyche*, is used to signify the Soul, and also a Butterfly.

## THE LEECH.



THE Leech is of the class *Annelida*, a word derived from *Annellus*, a small ring ; the skin of the animals of this division being composed of a large number of soft rings. The Earth-worm is one of this family : the other members of the class inhabit the water.

The form of the Leech must be well-known to most readers. Its blood is red : it has eight or ten small eyes : at each end of the body is a sucker. In the middle of the front sucker, close to the eyes, are three sharp little teeth, placed triangularly, each having an edge like that of a saw ; and by these wonderful instruments the creature is enabled to act a very important part in the alleviation and removal of human suffering. Many persons have reason to feel most thankful for the relief afforded in cases of inflammation by this little animal,

which has the art of piercing the patient's skin, and sucking the blood in great quantities into its stomach.

The demand for medicinal leeches is so large, that they have become scarce with us ; but great numbers are constantly imported from the Continent. The supplies arrive chiefly from France, Sweden, Poland, and Hungary. A Leech-fisher may be often seen at La Brenne, in France, moving about along the borders of a marsh, among bulrushes and weeds lately left by the waters. His legs and feet are bare. To these the Leeches fix their front suckers, and he knows by the bite when he has got a prize. He has over his shoulders a bag, in which, in the course of three or four hours, he will stow ten or twelve dozen Leeches. They live, though packed very closely in this moist sack : when he gets home he empties it, examines his captives, large and small, black and green, and then sorts them for the market. Those are reckoned the best which are of a dark green ground, with yellow stripes crossing the rings of the body. The Horse-Leech, which is mentioned in Scripture\* for its voracity, is common in shallow pools and stagnant waters.

### THE STAR-FISH AND SEA-URCHIN.

THESE remarkable animals belong to the great division called Radiata ; their organs being disposed in a circular form, and arranged round a centre. The creatures of this division descend low in the scale of animated nature ; their constitution, indeed, seems so nearly allied to that of the vegetable life, as with difficulty to be distinguished from it. Their senses—except the sense of touch—are very feeble, if not actually wanting : there is no organ answering to a heart, and no circulation of anything like blood. They are all natives of the sea.

The common form of the Star-fish is that of a star

\* Prov. xxx. 15.

with five rays or fingers, as shown in that species which is common on our sea-shores. The skin is rough. On the under-surface of each ray are furrows full of small holes, from which sucker-feet project. The mouth, in the centre of the under-side, is surrounded by a bony ring, but has no teeth. Yet the Star-fish is very voracious, and feeds greedily on decaying animal matter, making much havoc among shell-fish. It is so fond of oysters,



and so ingenious in extracting them from their shells, that, according to some ancient Admiralty regulations, any person seeing one of these Star-fish, or "Five-fingers," was obliged to crush it beneath his feet, or throw it out of the reach of the tide.

In the Medusa's Head, and *Euryale Scutata*, the rays

are divided into branches of great length and number. Upwards of 2,500 branches have been counted on a single specimen, forming a living net in which any small animal, once caught, is sure to be destroyed. Small crabs, and small shell-fish of different kinds, are swallowed entire.

The Eatable Sea-urchin is enclosed in a natural box, much of the shape of an orange ; this box being covered with spines, like those of a hedgehog. In order to examine the box, the spines must be removed ; and in the numerous pieces fitted neatly together will be observed a wonderful arrangement of parts, discovering much beauty, and showing the marvellous manner in which nourishment is supplied to the seemingly inactive frame : for the creature possesses a mouth, jaws, and teeth, and lives chiefly on young crabs and small shell-fish.

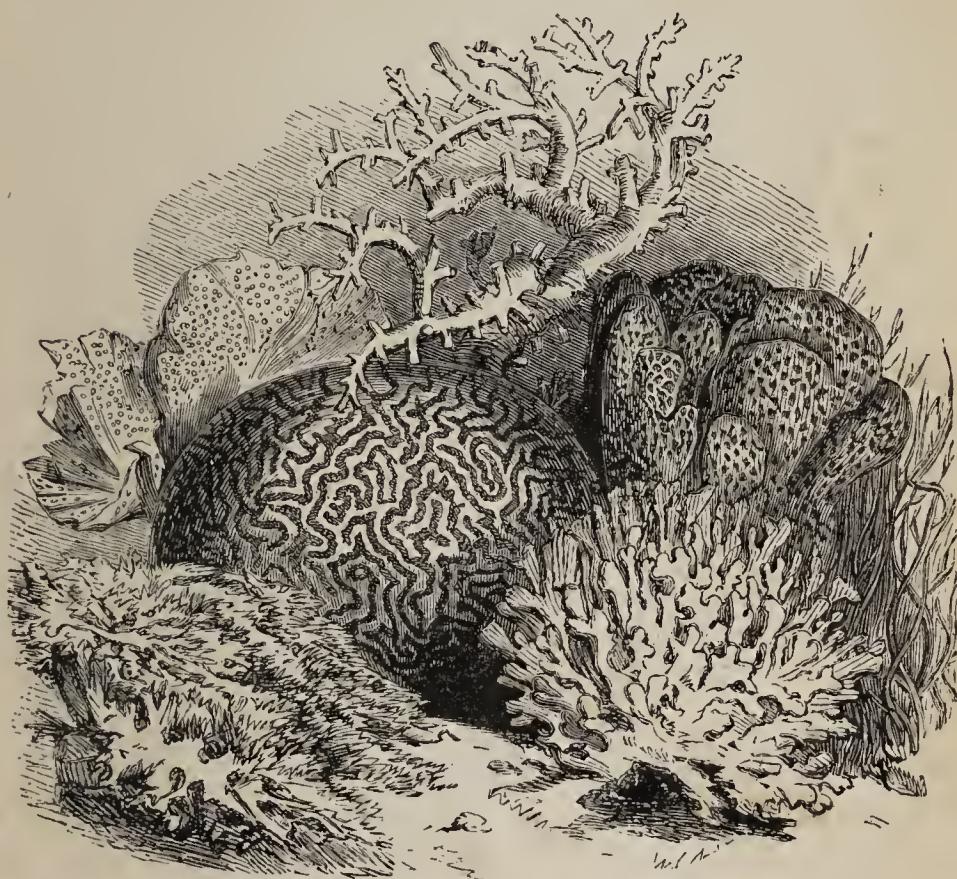
Anatomists have carefully examined the structure of the *Echinus*, and furnished descriptions, the perusal of which tends to fill our hearts and minds with surprise and admiration at the wisdom of the Almighty, as evinced in the works of His hands.

---

### MADREPORES AND CORALS.

THE POLYPI form a class nearly approaching the vegetable kingdom. All of this class are aquatic : a few inhabit fresh waters, but the greater number are marine, and are found in all seas. Those of the order *Carnosi* are often very beautiful, and are like flowers, some very richly, others most delicately coloured. These are named after the anemone, the marigold, the aster, &c. They are found on the rocks of the sea-shore, and, when kept alive in a glass vessel of sea-water, are interesting objects of attention. Fine specimens are to be seen in Covent Garden. The water should be changed from time to time.

The Polypes include many species, among which is the well-known and valuable red coral, with its branching, stony stem of extreme hardness. It grows like a tree, from a fixed base attached to stones, fragments of rocks, and various hard substances at the bottom of the deep. It is covered with a sort of bark of living flesh, consisting of small polypes, which change from a soft



substance into a compact and solid material, admitting a high polish. The stem sometimes grows, in eight or ten years, to the height of a foot.

Coral-fisheries are established in some parts of the Mediterranean. The ground is divided into several portions, which are dragged for crops of coral at stated intervals.

The large families of madrepores, which come under

this order, have more important functions to perform. Vast reefs of solid rocks, and large clusters of islands, have been formed by the joint labours of these little polypes, often known as the white coral.

“I saw the living pile ascend,  
The mausoleum of the architects,  
Still dying upwards, as their labours closed.”

Such is the origin of the remarkable coral-reefs, covered with verdure, and surrounding their lagoons or lakes. Several coral-islands are found in the South Pacific Ocean. One of these is Oeno, the nearest island to Pitcairn. The approach is so bad, owing to the reefs of coral encompassing the lagoon, that, when the late Admiral Beechey, in 1825, attempted to land, the boat was broken to pieces, and a lad of the party was drowned.

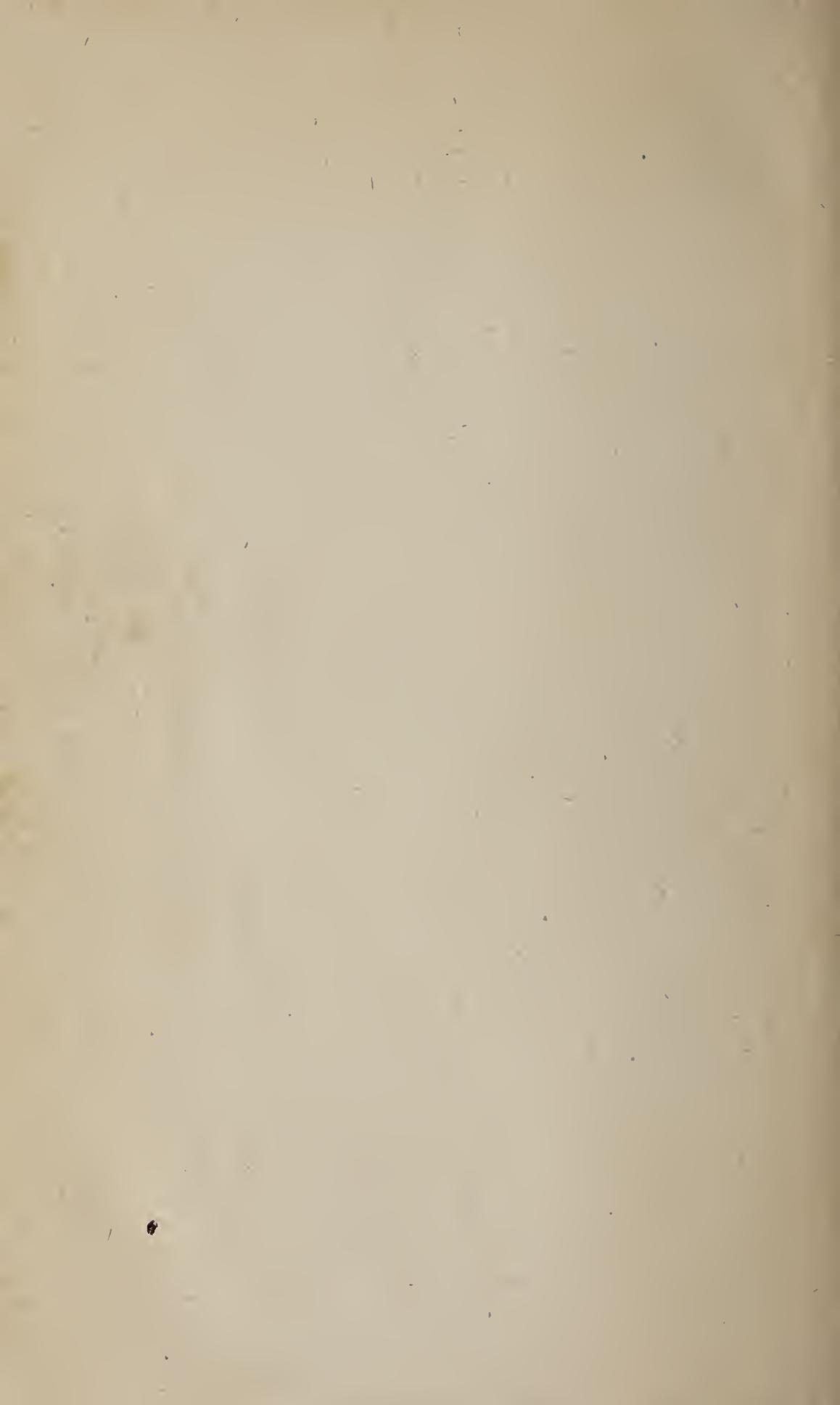
“Every one,” says Mr. Darwin, “must be struck with astonishment when he first beholds one of these vast rings of coral rock, often many leagues in diameter, here and there surmounted by a low verdant island with dazzling white shores, bathed on the outside by the foaming breakers of the ocean, and on the inside surrounding a calm expanse of water, which, from reflection, is of a bright but pale green colour. The naturalist will feel this astonishment more deeply after having examined the soft and almost gelatinous bodies of these apparently insignificant creatures, and when he knows that the solid reef increases only on the outer edge, which, day and night, is lashed by the breakers of an ocean never at rest.”

## CONCLUSION.

I have now concluded the descriptions of this first series of Animals. These short descriptions are, I know, imperfect. Much more that is interesting and important might have been brought forward respecting each, had the space permitted ; and many other creatures will be described in the second series of sketches. Enough, however, it is hoped, has been presented to the Reader to display, in a great degree, the beauties and wonders of creation, to raise our thoughts to HIM whose name is Wonderful, and to engage our sympathies in behalf of the inferior creatures of His hand.

In pursuing the study of what are sometimes called the works of nature, let us ever bear in mind that “the effects of nature are the works of GOD, whose hand and instrument only she is. And therefore to ascribe His actions unto her, is to devolve the honour of the principal Agent upon the instrument : which if with reason we may do, then let our hammers rise up, and boast they have built our houses ; and let our pens receive the honour of our writings.” \*

\* Sir Thomas Brown.



# INDEX.

---

POPULAR NAMES.	SCIENTIFIC NAMES IN BRITISH MUSEUM COLLECTION.	PAGE
Orang-Outan . . . . .	<i>Simia satyrus</i> . . . . .	1
Toque . . . . .	<i>Macacus radiatus</i> . . . . .	3
Mandrill . . . . .	<i>Papio maimon</i> . . . . .	5
White-fronted Lemur . . . . .	<i>Lemur albifrons</i> . . . . .	6
Long-eared Bat . . . . .	<i>Plecotus communis</i> . . . . .	8
Vampire Bat . . . . .	<i>Sturnina spectrum</i> . . . . .	10
Hedgehog . . . . .	<i>Erinaceus europaeus</i> . . . . .	11
Mole . . . . .	<i>Talpa europaea</i> . . . . .	13
Shrew . . . . .	<i>Crocidura aranea</i> . . . . .	14
Brown Bear . . . . .	<i>Ursus arctos</i> . . . . .	16
White Bear . . . . .	<i>Thalarctos maritimus</i> . . . . .	17
Badger . . . . .	<i>Meles taxus</i> . . . . .	19
Common Weasel . . . . .	<i>Mustela vulgaris</i> . . . . .	21
Common Otter . . . . .	<i>Lutra vulgaris</i> . . . . .	23
African Lion . . . . .	<i>Lco barbarus</i> . . . . .	25
Tiger . . . . .	<i>Tigris regalis</i> . . . . .	26
Leopard . . . . .	<i>Leopardus varius</i> . . . . .	28
Jaguar . . . . .	<i>Leopardus onca</i> . . . . .	30
Domestic Cat . . . . .	<i>Felis domestica</i> . . . . .	31
Shepherd's Dog . . . . .	<i>Canis familiaris, variety</i> . . . . .	33
Newfoundland Dog . . . . .	<i>Canis familiaris, variety</i> . . . . .	35
Esquimaux Dog . . . . .	<i>Canis familiaris, variety</i> . . . . .	36
Wolf . . . . .	<i>Canis lupus</i> . . . . .	38
Jackal . . . . .	<i>Canis aureus</i> . . . . .	40
Common Fox . . . . .	<i>Vulpes vulgaris</i> . . . . .	42
Striped Hyæna . . . . .	<i>Hyaena striata</i> . . . . .	44
Common Seal . . . . .	<i>Phoca vitulina</i> . . . . .	45
Walrus . . . . .	<i>Trickechus rosmarus</i> . . . . .	47
Dolphin . . . . .	<i>Delphinus delphis</i> . . . . .	49
Common Porpoise . . . . .	<i>Phocæna communis</i> . . . . .	51
Common Whale . . . . .	<i>Balaena mysticetus</i> . . . . .	52
Fin Whale, or Rorqual . . . . .	<i>Balaenoptera rostrata</i> . . . . .	54
American Manatee . . . . .	<i>Manatus australis</i> . . . . .	56
Indian Elephant . . . . .	<i>Elephas indicus</i> . . . . .	57
Hippopotamus . . . . .	<i>Hippopotamus amphibius</i> . . . . .	59
Wild Boar . . . . .	<i>Sus scrofa</i> . . . . .	61
Common Hog . . . . .	<i>Sus scrofa, variety</i> . . . . .	63
Rhinoceros . . . . .	<i>Rhinoceros unicornis</i> . . . . .	65
American Tapir . . . . .	<i>Tapirus terrestris</i> . . . . .	67
Race-Horse . . . . .	<i>Equus caballus, variety</i> . . . . .	68

# INDEX.

POPULAR NAMES.	SCIENTIFIC NAMES IN BRITISH MUSEUM COLLECTION.	PAGE
Cart-Horse . . . . .	<i>Equus caballus, variety</i> . . . . .	70
Zebra . . . . .	<i>Asinus zebra</i> . . . . .	72
Common Ass . . . . .	<i>Asinus vulgaris</i> . . . . .	74
Dromedary . . . . .	<i>Camelus dromedarius</i> . . . . .	76
Llama . . . . .	<i>Lama paeos</i> . . . . .	78
Elk . . . . .	<i>Alees palmatus</i> . . . . .	80
Rein-Deer . . . . .	<i>Rangifer tarandus</i> . . . . .	82
Red Deer . . . . .	<i>Cervus elephas</i> . . . . .	83
Roebuck . . . . .	<i>Capreolus caprea</i> . . . . .	85
Giraffe . . . . .	<i>Camelopardalis giraffa</i> . . . . .	87
Dorcas Gazelle . . . . .	<i>Gazella doreas</i> . . . . .	89
Nylghau . . . . .	<i>Portax pieta</i> . . . . .	91
Gnu . . . . .	<i>Catoblepas gnu</i> . . . . .	92
Chamois . . . . .	<i>Rupicapra tragus</i> . . . . .	94
Ibex . . . . .	<i>Capra ibex</i> . . . . .	96
Common Goat . . . . .	<i>Hircus aegagrus</i> . . . . .	97
Syrian Goat . . . . .	<i>Hircus aegagrus, variety</i> . . . . .	99
Common Sheep . . . . .	<i>Ovis aries, variety</i> . . . . .	101
Cape Buffalo . . . . .	<i>Bubalus eaffer</i> . . . . .	103
American Bison . . . . .	<i>Bison bonassus</i> . . . . .	106
Indian Ox . . . . .	<i>Bos taurus, variety</i> . . . . .	104
English Bull . . . . .	<i>Bos taurus, variety</i> . . . . .	108
English Cow . . . . .	<i>Bos taurus, variety</i> . . . . .	110
Beaver . . . . .	<i>Castor fiber</i> . . . . .	112
Common Mouse . . . . .	<i>Mus museulus</i> . . . . .	114
Common Rat . . . . .	<i>Mus decumanus</i> . . . . .	115
Chinchilla . . . . .	<i>Chinchilla laniger</i> . . . . .	117
Jerboa . . . . .	<i>Dipus aegyptius</i> . . . . .	119
Common Squirrel . . . . .	<i>Sciurus europaeus</i> . . . . .	120
Flying Squirrel . . . . .	<i>Sciuropterus volucella</i> . . . . .	122
Crested Porcupine . . . . .	<i>Hystrix eristata</i> . . . . .	124
Brazilian Porcupine . . . . .	<i>Cereolabes prehensilis</i> . . . . .	125
Common Hare . . . . .	<i>Lepus timidus</i> . . . . .	127
Common Rabbit . . . . .	<i>Lepus cuniculus</i> . . . . .	128
Guinea Pig . . . . .	<i>Cavia aperae</i> . . . . .	130
Three-toed Sloth . . . . .	<i>Bradypus tridactylus</i> . . . . .	132
Armadillo . . . . .	<i>Dasyurus sexineetus</i> . . . . .	134
Great Ant Bear . . . . .	<i>Myrmecophaga jubata</i> . . . . .	136
Manis . . . . .	<i>Manis pentadactyla</i> . . . . .	137
Virginian Opossum . . . . .	<i>Didelphis virginiana</i> . . . . .	139
Duck-billed Platypus . . . . .	<i>Platypus anatinus</i> . . . . .	140
Great Kangaroo . . . . .	<i>Macropus major</i> . . . . .	142
Condor . . . . .	<i>Sarcogyps griffus</i> . . . . .	147
Egyptian Vulture . . . . .	<i>Neophron perenopterus</i> . . . . .	149
Golden Eagle . . . . .	<i>Aquila chrysaetos</i> . . . . .	150
Harpy Eagle . . . . .	<i>Spizaetus ornatus</i> . . . . .	153
Peregrine Falcon . . . . .	<i>Falco peregrinus</i> . . . . .	154
Kite . . . . .	<i>Milvus regalis</i> . . . . .	156
White Barn-Owl . . . . .	<i>Strix flammea</i> . . . . .	158

## INDEX.

POPULAR NAMES.	SCIENTIFIC NAMES IN BRITISH MUSEUM COLLECTION.	PAGE
Great Snowy Owl . . . . .	<i>Nyctea nivea</i> . . . . .	160
Song Thrush . . . . .	<i>Turdus musicus</i> . . . . .	162
Redbreast . . . . .	<i>Erythacus rubecula</i> . . . . .	164
Nightingale . . . . .	<i>Luscinia philomela</i> . . . . .	165
Long-tailed Titmouse . . . . .	<i>Parus caudatus</i> . . . . .	167
Skylark . . . . .	<i>Alauda arvensis</i> . . . . .	169
House Sparrow . . . . .	<i>Passer domesticus</i> . . . . .	171
Goldfinch . . . . .	<i>Fringilla carduelis</i> . . . . .	173
Starling . . . . .	<i>Sturnus vulgaris</i> . . . . .	175
Raven . . . . .	<i>Corvus corax</i> . . . . .	177
Magpie . . . . .	<i>Pica caudata</i> . . . . .	179
Common Kingfisher . . . . .	<i>Alcedo ispida</i> . . . . .	181
Chimney Swallow . . . . .	<i>Hirundo rustica</i> . . . . .	182
Night Jar . . . . .	<i>Caprimulgus europaeus</i> . . . . .	184
Birds of Paradisc . . . . .	<i>Family of the Paradiseidae</i> . . . . .	186
Green Woodpecker . . . . .	<i>Geocinus viridis</i> . . . . .	188
Humming Birds . . . . .	<i>Family of the Trochilidae</i> . . . . .	190
Cuckoo . . . . .	<i>Cuculus canorus</i> . . . . .	192
Common Grey Parrot . . . . .	<i>Psittacus erythacus</i> . . . . .	194
Alexandrine Parakeet . . . . .	<i>Palaeornis alexandri</i> . . . . .	196
Blue and Yellow Macaw . . . . .	<i>Ara ararauna</i> . . . . .	198
Turtle Dove . . . . .	<i>Turtur auritus</i> . . . . .	200
Turkey . . . . .	<i>Meleagris gallopavo</i> . . . . .	201
Peacock . . . . .	<i>Pavo cristatus</i> . . . . .	203
Common Pheasant . . . . .	<i>Phasianus colchicus</i> . . . . .	205
Common Cock . . . . .	<i>Gallus bankiva, variety</i> . . . . .	207
Common Hen . . . . .	<i>Gallus bankiva, variety</i> . . . . .	209
Common Partridge . . . . .	<i>Perdix cinerea</i> . . . . .	211
Black Grouse . . . . .	<i>Lyrurus tetrix</i> . . . . .	213
Common Quail . . . . .	<i>Coturnix communis</i> . . . . .	214
Ostrich . . . . .	<i>Struthio camelus</i> . . . . .	216
Cassowary . . . . .	<i>Casuarius emu</i> . . . . .	218
Emu . . . . .	<i>Dromainia novae hollandiae</i> . . . . .	220
Great Bustard . . . . .	<i>Otis tarda</i> . . . . .	222
Golden Plover . . . . .	<i>Churadrius pluvialis</i> . . . . .	224
Lapwing . . . . .	<i>Vanellus cristatus</i> . . . . .	226
Common Heron . . . . .	<i>Ardca cinerea</i> . . . . .	228
Bittern . . . . .	<i>Botaurus stellaris</i> . . . . .	230
White Stork . . . . .	<i>Ciconia alba</i> . . . . .	232
Scarlet Ibis . . . . .	<i>Ibis rutra</i> . . . . .	234
Woodcock . . . . .	<i>Scolopax rusticola</i> . . . . .	236
Water Rail . . . . .	<i>Rallus aquaticus</i> . . . . .	237
Coot . . . . .	<i>Fulica atra</i> . . . . .	239
Flamingo . . . . .	<i>Phoenicopterus ruber</i> . . . . .	241
Common Goose . . . . .	<i>Anser ferus</i> . . . . .	243
Common Swan . . . . .	<i>Cygnus mansuetus</i> . . . . .	245
Common Mallard Duck . . . . .	<i>Anas moschas, variety</i> . . . . .	247
Eared Grebe . . . . .	<i>Podiceps auritus</i> . . . . .	249
Patagonian Penguin . . . . .	<i>Aptenodytes pennantii</i> . . . . .	250

# INDEX.

POPULAR NAMES.	SCIENTIFIC NAMES IN BRITISH MUSEUM COLLECTION.	PAGE
Great Auk . . . . .	<i>Alca impennis</i> . . . . .	252
White Pelican . . . . .	<i>Pelecanus onocrotalus</i> . . . . .	254
Common Cormorant . . . . .	<i>Phalacrocorax carbo</i> . . . . .	256
Great Black-backed Gull . . . . .	<i>Larus marinus</i> . . . . .	258
Common Bordered Tortoise . . . . .	<i>Testudo marginata</i> . . . . .	263
Hawk's-bill Turtle . . . . .	<i>Caretta imbricata</i> . . . . .	265
Crocodile . . . . .	<i>Crocodylus vulgaris</i> . . . . .	267
Sand Lizard . . . . .	<i>Lacerta agilis</i> . . . . .	268
Blind Worm . . . . .	<i>Anguis fragilis</i> . . . . .	271
Boa . . . . .	<i>Boa constrictor</i> . . . . .	273
Common Snake . . . . .	<i>Tropidonotus natrix</i> . . . . .	275
Rattlesnake . . . . .	<i>Crotalus horridus</i> . . . . .	277
Egyptian Cobra . . . . .	<i>Naja haje</i> . . . . .	279
Common Viper . . . . .	<i>Pelias berus</i> . . . . .	281
Common Frog . . . . .	<i>Rana temporaris</i> . . . . .	283
Common Toad . . . . .	<i>Bufo vulgaris</i> . . . . .	285
Common Perch . . . . .	<i>Percia fluviatilis</i> . . . . .	289
Common Mackarel . . . . .	<i>Scomber scombrus</i> . . . . .	290
Sword-Fish . . . . .	<i>Xiphias gladius</i> . . . . .	293
Common Carp . . . . .	<i>Cyprinus carpio</i> . . . . .	295
Common Pike . . . . .	<i>Esox lucius</i> . . . . .	297
Flying Fish . . . . .	<i>Exocætus volitans</i> . . . . .	299
Common Salmon . . . . .	<i>Salmo salar</i> . . . . .	301
Common Trout . . . . .	<i>Salmo fario</i> . . . . .	303
Common Herring . . . . .	<i>Clupea harengus</i> . . . . .	305
Common Cod . . . . .	<i>Morrhua callarias</i> . . . . .	307
Haddock . . . . .	<i>Morrhua æglefatuus</i> . . . . .	309
Turbot. . . . .	<i>Psetta maxima</i> . . . . .	311
Common Eel . . . . .	<i>Anguilla acutirostris</i> . . . . .	312
Common Sturgeon. . . . .	<i>Acipenser atillus</i> . . . . .	315
White Shark . . . . .	<i>Squalus carcharias</i> . . . . .	316
Common Skate . . . . .	<i>Raja batis</i> . . . . .	319
Common Cuttle-fish . . . . .	<i>Scpia officinalis</i> . . . . .	320
Common Oyster . . . . .	<i>Ostrea edulis</i> . . . . .	323
Pinna . . . . .	<i>Pinna squamosa</i> . . . . .	325
Common Crab . . . . .	<i>Cancer pagurus</i> . . . . .	326
Common Lobster . . . . .	<i>Astacus gammaurus</i> . . . . .	328
Common Scorpion. . . . .	<i>Scorpio megacephalus</i> . . . . .	330
Stag Beetle . . . . .	<i>Lucanus cervus</i> . . . . .	331
Caterpillar . . . . .	<i>A Larva of the order "Lepidoptera"</i> . . . . .	333
Locust . . . . .	<i>Acrydium migratorius</i> . . . . .	334
Dragon Fly . . . . .	<i>Æshna maculatissima</i> . . . . .	335
Peacock Butterfly . . . . .	<i>Vanessa Io</i> . . . . .	335
Medicinal Leech . . . . .	<i>Hirudo medicinalis</i> . . . . .	337
Star-fish . . . . .	<i>Asterias rubens</i> . . . . .	338
Sea Urchins . . . . .	<i>Echinus esculentus, &amp;c.</i> . . . . .	338
The Brainstone Madrepore . . . . .	<i>Meandrina cerebriformis</i> . . . . .	340
Corals . . . . .	<i>Order "Corallidae"</i> . . . . .	340

# PUBLICATIONS

OF THE

## Society for Promoting Christian Knowledge.

*Most of these Works may be had in ornamental bindings,  
with gilt edges, at a small extra charge.*

	Price. <i>s. d.</i>
<b>Adventures of Marshal Vavasour, Midshipman.</b>	
With three full-page illustrations on toned paper. Crown 8vo, cloth boards . . . . .	1 6
<b>Alice in the Country.</b>	
On toned paper, with three full-page illustrations. Royal 16mo, cloth boards . . . . .	1 6
<b>Brave Dame Mary ; or, The Siege of Corfe Castle.</b>	
With three full-page illustrations on toned paper. Crown 8vo, cloth boards . . . . .	2 0
<b>Butterflies and Fairies.</b>	
On toned paper with six full-page illustrations. Royal 16mo, cloth boards . . . . .	2 0
<b>Castle Cornet ; or, the Island's Troubles in the Troublous Times.</b>	
A Story of the Channel Islands. By LOUISA HAWTREY. With four illustrations on toned paper. Crown 8vo, cloth boards	2 0
<b>Cathedral Organist, The.</b>	
By the Author of "Madeleine's Forgiveness." 18mo, cloth boards . . . . .	1 0
<b>Charlie Tyrrell, and other Tales illustrative of the Lord's Prayer.</b>	
By C. E. BOWEN, Author of "New Stories on Old Subjects." Three full-page illustrations on toned paper. Crown 8vo, cloth boards . . . . .	1 6
<b>Effie and her Ayah ; or, The Faithful Monkey and his little White Mistress.</b>	
On toned paper, with four full-page illustrations. Royal 16mo, cloth boards . . . . .	1 6
<b>Ellen North's Crumbs.</b>	
By ANNA H. DRURY, Author of "Richard Rowe's Parcel," &c. With three full-page illustrations on toned paper. Fcap 8vo, cloth boards . . . . .	1 6
<b>Fables in Verse, and other Poems.</b>	
Translated from the German and French by a Father and Daughter. With numerous illustrations on toned paper. Royal 16mo, cloth boards . . . . .	1 0

PUBLICATIONS OF THE SOCIETY

Price.  
s. d.

**First Rector of Burgstead, The.**

A Tale of the Saxon Church. By the Rev. E. L. CUTTS, B.A.,  
Author of "The Villa of Claudio," "St. Cedd's Cross," &c.  
With three full-page illustrations on toned paper. Fcp. 8vo,  
cloth boards . . . . . 1 6

**Frank Weston's Mistakes; or, Don't be too Sure.**

On toned paper. Royal 16mo, cloth boards . . . . . 1 0

**Fortunes of the Fletchers, The: a Story of Life in  
Canada and Australia.**

By C. H. EDEN, Esq. With three full-page illustrations on  
toned paper. Crown 8vo, cloth boards . . . . . 2 6

**Golden Gorse; and Uncle Mark's Snowballs.**

By FLORENCE WILFORD. With three illustrations on toned  
paper. Crown 8vo, cloth boards . . . . . 1 6

**His Heart's Desire.**

With three full-page illustrations on toned paper. Crown  
8vo, cloth boards . . . . . 1 6

**Honest Owen and his Blind Sister.**

18mo, cloth boards . . . . . 1 0

**Janetta; or, The Little Maid-of-all-Work.**

With three illustrations on toned paper. Crown 8vo, cloth  
boards . . . . . 1 6

**King's Namesake, The.**

A Tale of Carisbrooke Castle. By CATHERINE MARY PHIL-  
LIMORE. With four full-page illustrations on toned paper.  
Crown 8vo, cloth boards . . . . . 2 0

**Klatsassan, and other Reminiscences of Missionary  
Life in British Columbia.**

By the Rev. R. C. LUNDIN BROWN, M.A. With map and  
three full-page illustrations on toned paper. Post 8vo, cloth  
boards . . . . . 3 0

**Land of Rest, The.**

Royal 16mo, cloth boards . . . . . 1 0

**Life Underground—in the Church Tower—the  
Woods—and the Old Keep.**

By the Author of "Life in the Walls," &c., &c. On toned  
paper, with four illustrations. Royal 16mo, cloth, gilt edges . 1 6

**Ling Bank Cottage: A Tale for Working Girls.**

With two illustrations on toned paper. Crown 8vo, cloth  
boards . . . . . 2 0

**Little Housekeeper, The.**

18mo, cloth boards . . . . . 1 0

**Lofty Aims and Lowly Efforts: A Tale of Christian  
Ministry.**

With three full-page illustrations on toned paper. Crown 8vo,  
cloth boards . . . . . 3 0

FOR PROMOTING CHRISTIAN KNOWLEDGE.

Price.  
s. d.

**Madge.**

On toned paper. Royal 16mo, cloth boards . . . . . 1 0

**Mark Woodford's Promise; or, A Boy's Obedience.**

18mo, cloth boards . . . . . 1 0

**Marie Antoinette, Thoughts on.**

By C. M. PHILLIMORE. On toned paper, with two illustrations.

Royal 16mo, cloth boards . . . . . 1 0

**Mary: a Tale of Humble Life.**

With three illustrations on toned paper. Crown 8vo, cloth boards 2 0

**Mattie of the Colonnade; or, A Tale of the Hop Fields.**

By S. BARBER, Author of "Maggie Hay," &c. 18mo, cloth boards . . . . . 1 0

**Meg's Primroses and other Stories.**

By H. M. CHESTER. On toned paper, with four full-page illustrations. Royal 16mo, cloth boards . . . . . 2 0

**Message, The, and other Stories.**

With three full-page illustrations on toned paper. Crown 8vo, cloth boards . . . . . 2 0

**Michael Penguyne; or, Fisher Life on the Cornish Coast.**

By W. H. G. KINGSTON. With three full-page illustrations on toned paper. Crown 8vo, cloth boards . . . . . 1 6

**Narrative of a Modern Pilgrimage through Palestine on Horseback, and with Tents.**

By Rev. ALFRED CHARLES SMITH, M.A. Numerous illustrations and four coloured plates. Crown 8vo, cloth boards . . . . . 5 0

**New Stories on Old Subjects.**

By C. E. BOWEN, Author of "Stories on my Duty towards God" and "My Neighbour," &c. With four full-page illustrations on toned paper. Crown 8vo, cloth boards . . . . . 3 0

**Odds and Ends, done up in Parcels to suit all Readers.**

Fcap. 8vo, paper boards . . . . . 1 0

**One of Life's Lessons.**

A Tale. By the Author of "Janet Thorne." 18mo, cloth boards . . . . . 1 6

**Panelled House, The: A Chronicle of Two Sisters' Lives.**

By M. BRAMSTON. With three illustrations on toned paper. Crown 8vo, cloth boards . . . . . 3 6

**Parables of Life.**

By the Author of "Earth's Many Voices." Royal 16mo, on toned paper, with seven illustrations. Cloth boards, gilt edges 2 0

PUBLICATIONS OF THE SOCIETY.

Price.  
s. d.

<b>Promadeni.</b>	
A Biographical Sketch connected with the Indian Mission among Women. By EUGENIA VON MIZLAFF. 18mo, cloth boards . . . . .	1 0
<b>Rottenstake Alley: A Tale of the Plaiting Districts.</b>	
Founded on Fact. 18mo, cloth boards . . . . .	1 0
<b>Seaside (A Month at the); or, A Sequel to Willie and May.</b>	
By Mrs. R. M. BRAY. Royal 16mo, cloth boards . . . . .	1 0
<b>School and Holidays.</b>	
A description of German Upper Class Life for Girls. Translated from the German. With three illustrations on toned paper. Fcap. 8vo, cloth boards . . . . .	1 6
<b>Sowing Dragon's Teeth.</b>	
Fcap. 8vo, cloth boards . . . . .	1 0
<b>Stories of Success, as Illustrated by the Lives of Humble Men who have made themselves Great.</b>	
By JAMES F. COBB, Esq., Author of "Silent Jim." With four illustrations on toned paper. Crown 8vo, cloth boards . . . . .	3 0
<b>Stranger than Fiction.</b>	
A Story of Mission Life. By the Rev. J. J. HALCOMBE, M.A. With eight full-page illustrations on toned paper. Post 8vo, cloth boards . . . . .	2 6
<b>Susan; or, The First Year in Service.</b>	
With a full-page illustration on toned paper. Crown 8vo, cloth boards . . . . .	1 0
<b>Thousand Years, A; or, The Missionary Centres of the Middle Ages.</b>	
By the Rev. JOHN WYSE. On toned paper, with four illustrations. Crown 8vo, cloth boards . . . . .	2 6
<b>Uncle Tom's Stories; or, Buzzes from Insect Land.</b>	
On toned paper, with four full-page illustrations. Royal 16mo, cloth boards . . . . .	1 6
<b>Village Beech Tree, The; or, Work and Trust.</b>	
With four full-page illustrations on toned paper. Crown 8vo, cloth boards . . . . .	2 6
<b>What Friends are Meant For.</b>	
By FLORENCE WILFORD. Royal 16mo. On toned paper. cloth boards . . . . .	1 6
<b>Year in the Country (A); A Tale of the Seasons.</b>	
Royal 16mo. On toned paper. Cloth boards . . . . .	1 6

**Depositories:**

77 GREAT QUEEN STREET, LINCOLN'S-INN FIELDS;  
 4 ROYAL EXCHANGE; 48 PICCADILLY;  
 AND BY ALL BOOKSELLERS.

